GLOXINIAN

The Journal for Gesneriad Growers

Vol. 53, No. 3

Third Quarter 2003



Nematanthus australis display fruit

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COVER

Nematanthus australis open display fruit with seeds grown by Maryjane Evans (photo by John Evans)

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Color photo on page 53 sponsored by Jeanne Katzenstein in memory of Maryjane Evans and Hans Wiehler

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President's Message

Susan Grose <sagrose@aol.com> 4201 West 99th St., Overland Park, KS 66207

Dear Fellow Gesneriad Growers,

This issue of THE GLOXINIAN holds a wealth of information on *Nematanthus* with an article by Dr. Alain Chautems on how he got involved with this genus as well as a composite article on favorite species and hybrids by different growers with a range of home-growing experiences. Nematanthus are among my favorite hanging basket plants for almost year-round bloom in my windows. I even grew an unnamed variety, purchased from a local garden center, outside in dappled shade last summer. I brought it indoors for the winter, but I did not have room for it in my light garden or in my brightest window. I hung it in a window that receives just a glimmer of late afternoon sun. It is amazing how well it has survived over the winter with this low light. The new growth has smaller leaves, but is not really leggy. I just checked, and it even has a few blossoms on the side facing the window! I plan to cut back the uneven growth when I put it back outside for the summer.

Inside you will also find the latest complete listing of the AGGS Seed Fund. I encourage everyone who orders seed to make a special effort to return seed to the Fund when the plants grown produce further seed. It is through the efforts of relatively few growers that the Seed Fund is able to offer such a wide variety of seed. Please think of it as a responsibility to the greater gesneriad community to give seed to the Fund from the species plants you grow, or we may lose some of our precious species gesneriads. Producing seed can be the group effort of a local chapter or affiliate or just a



Sinningia 'Star Eyes' is one of the gesneriads recently deleted from the Seed Fund listing. You can help: Grow selected plants, pollinate them as Maryjane Evans is doing here, harvest the seed and donate some to the Seed Fund. (photo by John Evans)

few interested individuals. Pick several different varieties, order seed from the Fund and share the seedlings with other growers. Compare cultural practices and growing experiences. Determine what conditions produce the best plants and flowers. Then set seed and return the excess harvest to the Seed Fund. This could even be a chapter project beginning with a seed planting workshop at one of your meetings. It's a good way to introduce new members to another dimension of gesneriad growing.

The gesneriad world has lost several important friends and long-time contributors to our knowledge of gesneriads. *Dr. Hans Wiehler* died in March on the island of Fiji where he was residing with some of his family. Not only did he share his plants and knowledge with individuals and our organization, but he had a deep concern for preserving the native habitats in which gesneriads and other tropical plants are found. *Maryjane Evans* managed the AGGS Seed Fund from 1989-1999; and during those ten years, the listings in The Gloxinian grew from a little over one page to its present six pages. Much of the increase and maintenance of the offerings were due to her personal efforts in producing seed and encouraging others to contribute. In addition, Maryjane graciously shared her plants, knowledge and love of gesneriads with everyone with whom she came in contact. *Dave Tyler*, one of our former Membership Secretaries, died in February. Please read further in this issue for more tributes to these special people.







Hans Wiehler

Maryjane Evans

Dave Tyler

I recently attended a lecture given by the director of a large botanic garden. He stated that if we don't improve some of our plant protection efforts worldwide, it is possible that two thirds of the existing species of plants of the world could disappear within this next century. As an organization with members all over the world, we should all try to contribute to the effort to prevent destruction of plant species wherever we can. In these times of political unrest in some parts of the world, plant species preservation can be a common goal and unifying force for worldwide cooperation.

What will your mark be on this planet? Make an effort to make some small difference and pass along some knowledge, some plant material and some passionate interest to a new grower.

Seed Fund

Bob & Carol Connelly <Bob_Connelly@email.msn.com> 2391 Phillips Drive, Auburn Hills, MI 48326-2450

1 the time you will be reading this column, it will be July and we will be either be at or just returning from the Sacramento Convention and will probably be complaining of the heat. Right now though, it is early April and we are recovering from a late season ice storm that knocked out our power for nearly four days. Fortunately for the Seed Fund, the outside temperatures were below freezing so the inside temperatures were cold enough to keep the seed cold even without power. Our plants didn't appreciate the cold as much, and we will probably lose some, but most will hopefully recover. It was also too cold for us, and we wound up spending a couple of nights at motels. Now we get to look forward to cleaning up the mess in the yard.

Another bit of bad news is in this month's seed list. We have had to delete 30 listings that have sold out since the previous list. Since the deletions tend to get buried in the full list, we will try something new and list them separately here. Hopefully those of you who are growing these varieties can collect and send us additional seed so they can be listed again. The latest deletions are:

Achimenes grandiflora 'Robert Dressler'

Aeschynanthus mimetes

A. parvifolius A. pulcher

A. sp. (Vietnam) 921622

Besleria sp. GRF9558 Chirita fimbrisepala #12

C. longgangensis

C. sericea

Columnea scandens var. tulae (yellow)

Drymonia pulchra GRF9889

Eucodonia verticillata Koellikeria erinoides

K. erinoides 'Red Satin'

Monopyle macrocarpa GRF98117 Nautilocalyx adenosiphon Sinningia aggregata 'Pendulina'

S. aff. aggregata (yellow)

S. schiffneri GRF91163 (red reverse)

S. sp. 'Lanata' MP622

S. 'Star Eyes'

Streptocarpus fenestra-dei S. kentaniensis (S. Kei River)

S. primulifolius (dk blue) Port St. John, Transkei

S. 'Suzie' \times self

Trichantha brenneri

T. minutiflora GRF9552

A little good news is also in this month's seed list. We have added seed listings for some gesneriads collected in northwestern Ecuador by John Clark. These can be identified by the JLC numbers and aren't listed separately here since everyone finds the new additions easily enough! John discussed these in a lecture at the 2000 Tampa Convention, and they are summarized in the Convention Lectures article in the 4Q02 issue of THE GLOXINIAN. We would like to give a very special thank you to John for his donations.

We would also like to thank the other recent contributors to the Seed Fund for their generosity: Marlene Beam, Bob Clark, Ray Coyle, Maryjane Evans, Thad Holcomb, Richard Holzman, Frank Kahn, Leong Tuck-Lock, Chris Leppard, Mauro Peixoto, Bill Price, Andrea Pirone, Carolyn Ripps, Carol Schreck, Lee Stradley, M.J. Tyler, Catherine Walbridge, Wallace Wells and Linda Zillich.

Seed Packets — \$1.50 each

Please

- Make checks payable to the AGGS Seed Fund in U.S. funds
- To pay by credit card, send your credit card number, expiration date, and signature, and indicate if the card is Mastercard or Visa (\$6.00 minimum)
- Provide a self-addressed, stamped envelope (non-U.S. orders may include International Postal Coupons or have the postage added to their credit card bill)
- List alternate choices
- Include your membership number (first number on your mailing label)

Achimenes (D)	Besleria
admirabilis (B)	barbata USBRG98-052
cettoana (B)	barclayi USBRG95-164
erecta (B)	cf. divaricata JLC5629
erecta 'Tiny Red' (F,L)	laxiflora GRF9675 (M)
longiflora (B)	melancholica (MT)
longiflora alba (B)	princeps GRF9479 (LM)
skinneri W1897 (L)	sp. GRF9783 (orange w/yellow base)
warszewicziana USBRG88-039 (B)	sp. GRF97108 (orange)
• hybrid mix (B,L)	sp. GRF97141 (orange)
Aeschynanthus (B)	sp. GRF9853 (yellow)
buxifolius 913296	sp. GRF98139 (orange)
ellipticus 'Coral Flame'	• sp. JLC5705
fulgens USBRG82-271	• sp. JLC6113
garrettii	Boea (F,R)
humilis USBRG94-214	hygroscopica
hosseusii	Briggsia (A,R)
longicalyx	aurantiaca
longiflorus	muscicola
micranthus	Capanea
parvifolius 'Bali Beauty'	grandiflora GRF9480 (M)
sp. MSBG87-162	Chirita
	• balansae USBRG98-082 (F,R)
• sp. (yellow) (Philippines)	
• hybrid, lg orange/red	caliginosa (LM)
Alloplectus	• fimbrisepala #4
bolivianus USBRG95-140 (M)	flavimaculata USBRG94-085 (R)
dodsonii (yellow) GRF98184 (M)	• heterotricha USBRG94-088 (F,R)
tetragonoides GRF98153	involucrata (F,L)
sp. aff. schultzii GRF97103	lavandulacea (LM)
sp. aff. panamensis GRF9781	micromusa (F,L)
(orange)	• pumila (F,L)
sp. GRF9776 (yellow)	• pumila USBRG2000-18 (F,LM)
sp. GRF9788 (pinkish/yellow above)	• spadiciformis USBRG94-087 (R)
sp. GRF97153 (peach/orange)	• subrhomboidea (F,R)
sp. GRF97166	• tamiana USBRG98-080 (F,R,P)
sp. GRF98151 (yellow)	walkerae (F,LM)
sp. USBRG98-030	• sp. (Thailand)
• sp. nov. JLC5617	sp. 'New York' USBRG85-022 (R)
sp. nov. (plicatissimus ined.)	• caliginosa × sericea (LM)
(salmon calyx) GRF9521	• (sp. 'New York' × flavimaculata)
sp. nov. (plicatissimus ined.)	\times self (F,R)
(green calyx) GRF9556	Chrysothemis (F,LM)
sp. nov. (prunifer ined.) GRF98174	friedrichsthaliana
Alsobia (B)	friedrichsthaliana GRF9764
dianthiflora	• pulchella (Ecuador)
• punctata	villosa
punctata USBRG77-103	hybrid mix
Anodiscus	Cobananthus
xanthophyllus (M)	calochlamys (F,LM)

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xanthophyllus (Ecuador) GRF97109

Codonanthe (B)	sp. GRF93191
calcarata 'Puyo'	sp. GRF97160
caribaea	• sp. GRF9852
carnosa	Diastema (D,F,P)
corniculata	racemiferum
crassifolia	vexans
crassifolia GRF9858	Didissandra
crassifolia GRF9869	• frutescens (H,M)
crassifolia 'Cranberry'	Drymonia
digna	affinis GRF98109
digna 'Moonlight'	alloplectoides USBRG96-347 (B)
erubescens	coccinea GRF9851 (B)
	coccinea GRF9873
gracilis	
paula	coccinea GRF98150
• serrulata AC1313	• conchocalyx (B)
• venosa GRF91175	conchocalyx 'Silver Lance' × self (M)
Columnea (B)	doratostyla GRF9674 (B)
crassifolia	• cf. ecuadorensis JLC6185
erythrophaea	ecuadorensis 'Red Elegance' (LM)
fendleri	hoppii GRF98103
gallicauda	macrophylla (M)
glicensteinii	mortoniana (L)
gloriosa	pulchra GRF98113
ĥirta	rhodoloma (B)
hirta GRF9493	serrulata (B)
hirta var. pilosissima	serrulata GRF9752
hispida	strigosa (B)
 inaequilatera JLC6072 	strigosa GRF1912
maculata	urceolata GRF93146 (LM)
 microcalyx GRF94110 	urceolata GRF97124 (red)
nicaraguensis CR92F16	urceolata GRF98154 (red w/yellow)
nicaraguensis GRF94105	sp. nov. (umecta ined.) (B)
oerstediana GRF9423	Episcia (H,L,B,F)
oxyphylla	• xantha
proctori W3573	cupreata hybrids mix
raymondii (LM)	hybrid mix
schiedeana	Epithema
schiedeana (red reverse)	• saxatile (F,L)
sulfurea G3770	Eucodonia (D,F,P)
tomentulosa	• andrieuxii
Conandron (A,R)	verticillata 'Ehrenberg'
ramondioides/Awaji Island	hybrid mix
Corallodiscus (A,R)	Gasteranthus (H)
• sp. USBRG2000-19 (China)	crispus USBRG98-033
Corytoplectus	giganteus
capitatus (LM)	lateralus
capitatus G291	• villosus
congestus GRF93259 (L)	wendlandianus GRF97154 (LM)
cutucuensis (L)	wendlandianus GRF97163
cutucuensis GRF9794	wendlandianus GRF98166
riceanus GRF9654 (M)	(w/red spots)
Cyrtandra	Gesneria (H,F,L)
cupulata (G,H,MT)	christii
Dalbergaria (M)	cuneifolia
asteroloma GRF97169 (white)	cuneifolia WEK96151
eburnea	cuneifolia WEK96152
medicinalis GRF9507	cuneifolia WEK96155
ornata GRF2665	cuneifolia WEK96157
• perpulchra	cuneifolia WEK96158
polyantha	cuneifolia 'Esperanza'
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pedunculosa USBRG97-102 (S,T)	cf. lanceolatus AC2010
pedunculosa WEK96153 (S,T)	maculatus (B)
pumila	serpens (B)
reticulata	strigillosus AC1434 (B)
 reticulata 'El Yunque' 	• strigillosus 'Ibitipoca' (B)
ventricosa (M)	tessmannii GRF9904 (red calyx) (B)
• viridiflora ssp. sintenisii	tessmannii GRF9912 (red calyx)
WEK96162 (T)	wettsteinii (B)
'Flashdance'	sp. 'Santa Teresa' (B)
Gloxinia (D)	sp. MP50
gymnostoma (LM)	Neomortonia (B)
lindeniana (F,L)	nummularia
nematanthodes (F,L)	Opithandra (A,R)
perennis (LM)	primuloides
perennis 'Insignis' (L)	Ornithoboea
racemosa (L)	wildeana (LM)
sylvatica (F,L)	Paliavana (S,T)
sylvatica GRF9943 (Brazil)	prasinata
sylvatica USBRG96-002 (Bolivia)	prasinata GRF732
Haberlea (A,R)	prasinata GRF91126
ferdinandi-coburgii	• prasinata × S. macropoda MP944
rhodopensis	• prasinata × S. reitzii MP949
Hemiboea (D)	• plumerioides (Cabral)
	sericiflora AC2311
subcapitata (L) Heppiella (D)	
neppieuu (D)	tenuiflora werdermannii AC2310
ulmifolia GRF95141 (L)	
ulmifolia GRF98172 Kohleria (D)	Paradrymonia
	ciliosa (L)
• allenii USBRG98-109 (M)	decurrens (L)
hirsuta (LM)	• lurida (L)
hirsuta USBRG96-163 (F,L)	Parakohleria
• hondensis (LM)	sp. GRF9780 (yellow)
• rugata USBRG95-010 (LM)	sp. GRF88105 (red) (L)
spicata (M)	sp. GRF98144 (rose pink)
hybrid mix	Pentadenia
Lysionotus (LM)	angustata (B)
pauciflorus var. pauciflorus	byrsina (B,L)
species	crassicaulis (B)
Monophyllaea (H,LM)	manabiana (B)
horsfieldii	microsepala GRF1837 (B)
Monopyle	orientandina (LM)
macrocarpa GRF94123	rileyi GRF86243 (LM)
Moussonia	spathulata GRF9503 (LM)
deppeana (M)	strigosa GRF95154 (B)
• elegans (M)	strigosa GRF9777
• elegans GRF9407	zapotalana (B)
septentrionalis G1201 (F,L)	Phinaea (D,F,P)
Napeanthus (H)	 albolineata
costaricensis (F,P)	divaricata
jelskii USBRG94-511 (F,P)	multiflora
robustus GRF9765 (L)	multiflora 'Tracery'
<i>Nautilocalyx</i>	Ramonda (A,R)
colonensis (LM)	myconi —
melittifolius (F,LM)	white
<i>Nematanthus</i>	lavender
australis (B)	pink
corticola (B)	clone G
fissus (L)	myconi (upright rosette)
fissus GRF9938	Rhynchoglossum (H,L)
fornix (B)	gardneri
fritschii (B)	obliquum
• iolyanus (Sao Paulo) (B)	· · · · · · · · · · · · · · · · · · ·

Rhvtidophyllum (G,H,S,T) lineata GRF9920 (LM) auriculatum lineata (highly spotted) tomentosum macropoda (M) • macropoda (dwarf form) (L) villosulum Saintpaulia (F,R) macrorrhiza (T) diplotricha macrostachya (LM) macrostachya MP262 ionantha magnifica GRF91121 (pink) (LM) shumensis magnifica MP627 (pink) Sinningia (D) aggregata (M) magnifica GRF91134 (red) mauroana (LM) aggregata AC1461 mauroana GRF9964 aghensis (T) aghensis AC2356 (T) micans MP892 (LM) allagophylla (MT) nivalis AC1460 (L) allagophylla GRF9922 nivalis GRF9923 allagophylla GRF9929 piresiana (L) allagophylla GRF9968 • pusilla (F.P) allagophylla (yellow) reitzii (M) amambayensis (L) reitzii GRF9914 (magenta) araneosa (F,L) rupicola AC1511 (F,L) brasiliensis (M) sceptrum (T) brasiliensis 'Verde' sceptrum AC2406 (T) brasiliensis AC1314 sellovii (MT) sellovii GRF9919 bulbosa (T) sellovii 'Bolivia' USBRG96-003 calcaria MP891 (F,L) sellovii 'Purple Rain' canescens (F,L) carangolensis (M) speciosa 'Cabo Frio' MP178 (F,L) cardinalis (F,LM) speciosa 'Lavender Queen' cardinalis (compact) (F,L) speciosa 'Regina' cardinalis (dark calyx) (LM) speciosa AC1652 cardinalis 'Innocent' • speciosa (Chiltern Seed Co) cochlearis (LM) speciosa AC1503 conspicua (F.L) sulcata (LM) conspicua GRF9942 (fragrant selection) tubiflora (S.MT) cooperi (LM) warmingii (T) cooperi AC1522 warmingii GRF9921 curtiflora (T) sp. aff. warmingii from curtiflora GRF9927 Ilhabela MP631 • sp. 'Esmeril' (L) • defoliata (D,H,LM) • sp. 'Waechter' (LM) douglasii GRF91188 (LM) douglasii GRF9936 (LM) cardinalis 'Innocent' × iarae (LM) douglasii (pink form) (M) glazioviana × leopoldii F2 (LM) speciosa AC1503 × speciosa douglasii (rose/purple)(D,MT) elatior AC1409 (M) 'Regina' (R) elatior GRF9963 · hybrid red peloric eumorpha/Saltao (L) eumorpha hybrids mix (F,R) eumorpha (lavender) (F,L) "Hummingbird Mix" eumorpha (pink) 'Anne Crowley' (F,L) eumorpha (white) • 'Apricot Bouquet' × self (LM) gigantifolia (LM) ('Apricot Bouquet' \times self) \times self (LM) glazioviana (L) ('Apricot Bouquet' \times self) \times harleyi MP482 (F,L) S. conspicua (F, L) hatschbachii (L) ('Apricot Bouquet' × self) × $(S.\ conspicua \times S.\ eumorpha)$ (F, L) iarae (F,L) • incarnata (S,MT) ('Apricot Bouquet' × self) × insularis (LM) S. sp. 'Regina' (F, L) leopoldii (F,L) • ('Apricot Bouquet' × self) × S. 'California Minis' (red) (F, LM) leucotricha (F,L) • leucotricha 'English' (F,L) • 'Beauty' \times self (F,P) 'Bewitched' \times self (F,L) • leucotricha (larger flower) (F,L) 'Cheryl M.' × self (F,P) lindleyi AC1501 (L) • 'Delta Fox' \times self (F,P)

lineata (LM)

'Diego' (red) (F,L) laui GRF9117 (F.L.) 'Diego' (pink) multiflora (F,LM) 'Dollbaby' (F,P) multiflora GRF9121 (F,LM) 'Good Pink' × self (F,L) • multiflora GRF9122 (F,LM) • 'Jubilee' × self (F.L) • zebrina GRF9104 (M) • 'Little One' (F,L) • 'Krezdorn Yellow' × self (L) • 'Leo B.' \times self (F,P) Streptocarpus • 'Little Imp' (F,P) baudertii (F.R) 'Maiden's Blush' × self (F,P) buchananii (B) • 'Mother of Pearl' × self (F,P) caeruleus (R) 'Mothers Day' \times self (F, L)'Pale Beauty' \times self (L)candidus (F.R) candidus/Ngome, Natal • 'Pink Ice' (F,P) caulescens (F,LM) • Premier Pink' × self (F,P) • compressus (U) 'Pure Pink' \times self (F,P) confusus (U) • 'Purple Crest' × self (F,P) confusus ssp. confusus (U) • 'Ruby Red' × self (F,P) cooksonii (dark purple) 'Scarlet Sunset' (F.P) cooperi (U) • 'Silhouette' × self (F,P) cyanandrus (F,P) 'Super Red' \times self (F,P) • cyaneus ssp. long-tomii (R) 'Tampa Bay Beauty' × self (L) cyaneus (blue) (R) 'Virgil' × self (LM) cyaneus (blue/long corolla) • 'Whimsey' × self (F,P) cyaneus (blue/short corolla) • 'Angora Love' × 'Margaret' (L) cyaneus (lilac) • 'Georgia Sunset' hybrid mix daviesii (F,U) hybrid miniature mix (F,P) denticulatus (U) • pink hybrid miniature mix (F,P) • dunnii (U) Sinningia speciosa hybrids (F,R) eylesii (U) blue mix fanniniae (R) mini dark pink fasciatus (R) lavender fasciatus/Krokodilpoort, lavender/purple E. Transvaal (R) pink floribundus (R) purple formosus (R) red formosus/E. Cape, Transkei gardenii (F,L) rose · gardenii/Weza, S. Natal white orchid/purple mix • glandulosissimus (B) goetzei (U) pink mix pink/white mix grandis (U) grandis (blue form) purple purple w/spots haygarthii (F,U) red mix haygarthii/Mkambati, Transkei red w/spots holstii (B,L) johannis (F,R) white w/red spots 'California Minis' johannis/Komga, E. Cape Charles Lawn hybrid mix johannis/Weza, S. Natal (R) Early Giant mix sp. aff. johannis (F,R) Jack Evans purple mix • kentaniensis MBG2335-60 (R) Jack Evans red mix • kentaniensis (N. Kei River) hvbrid mix kirkii (F.L) blue slipper meyeri (F,R) lavender slipper meyeri/SE Transvaal (R) meyeri/NE Cape Province pink slipper red slipper modestus (R) • modestus/Magwa Falls, Transkei (R) purple slipper mixed slipper molweniensis (U) pink dwarf muscosus (L) • Small's dwarf mix nobilis (M) pallidiflorus (F,LM) Smithiantha (D) aurantiaca (F,L) parviflorus (R) canarina GRF9105 (F,LM) parviflorus (mauve)

 parviflorus (white) (R) parviflorus (white/mauve) pentherianus (F,L) pole-evansii (R) polyanthus (F,L) polyanthus subsp. comptonii

polyanthus subsp. polyanthus polyanthus subsp. polyanthus/lg fl

polyanthus subsp. polyanthus/ Hammarsdale, Natal (R) polyanthus subsp. polyanthus/Valley of 1000 Hills, Natal polyanthus subsp. verecundus

porphyrostachys (U)

primulifolius (F,R)

primulifolius /Bullolo Rvr, Transkei primulifolius /Valley of 1000 Hills

prolixus (F,U) pumilus (F,P) rexii (F.L.R)

• rexii (blue) Transkei rexii (white) rexii (pale blue/long corolla)

rexii (white/blue mix)

rimicola (F,P) roseoalbus (F,R)

saundersii (U) saxorum (B)

silvaticus (R)

stomandrus (F,L)

thompsonii (B,L) thysanotus (B,L)

trabeculatus (U)

vandeleurii (U) variabilis (F,R)

wendlandii (U) wilmsii (U)

 wilmsii/Graskop wilmsii/Long Tom Pass

 'Bethan' × self (R) 'Bristol's Popsicle' \times self (R) 'Cape Beauties' \times self (F,P)

• 'Canterbury Surprise' × self (F,R)

'Demeter' \times self (R)

'Falling Stars' \times self (R) 'Georgette' \times self (R)

• 'Gloria' × self (R)

• 'Kitten Face' × self (R)

'Mini Pink Fu' \times self (R) 'Party Doll' \times self (R)

'Pegasus' \times self (R) 'Royal' (red) (R)

'Royal' (white/pink stripes) (R)

'Sandra' \times self (R) Thalia' \times self (R)

• 'Ulysses' × self (R)

• New Zealand hybrid mix (F,R) rexii hybrids (F,R)

 Wiesmoor hybrids (F,R) hybrid mix (F,R) hybrid, lt blue/dk blue lines (R) hybrid, lg burgundy (R)

• hybrid, lg purple (R) hybrid, lg white (R)

• *streptocarpella* hybrids (B)

Titanotrichum

oldhamii (propagules)

Trichantha

ambigua (B)

ambigua 'El Yunque' WEK96163

citrina (B) dodsonii (LM)

kucyniakii GRF93166 (MT)

purpureovittata (B,L)

Vanhouttea (S,T)

calcarata GRF3026

lanata

lanata AC2405

pendula/Caparaõ

brueggeri (S,T)

Mixed alpine gesneriads Mixed gesneriads

denotes LIMITED quantities

(A) Alpine or cool greenhouse.

(B) Suitable for hanging basket.

(D) Has dormant period, forming tubers or rhizomes.

(F) Blooms readily in fluorescent light.

(G) Recommended for greenhouses; requires space.

(H) Requires humidity and warmth.

(L) Low growing; not more than 12". (LM) Low to medium height.

(M) Medium height; 1 to 2 feet.

(MT) Medium to tall.

(P) Petite or miniature; not more than 6 inches tall.

(R) Rosette in form.

(S)Requires sun to bloom.

(T) Tall plants; generally over 3 feet.

(U) Unifoliate or single leaf.

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Maryjane Evans – Plant Woman *Extraordinaire*

Jeanne Katzenstein (New Jersey, USA) — Maryjane was a plant person. From simple beginnings, sowing seeds as a child, later growing common house-plants as a young wife and mother, she grew to become a "professional" horticulturist specializing in gesneriads. She was a voracious reader who also listened and learned from others who studied and grew ... and then applied that knowledge, along with her own experiences, to growing gesneriads to perfection. To add to her knowledge, Maryjane traveled to gesneriad rainforest areas, absorbing data on natural habitats and collecting seed.

She found growing from seed rewarding, and over the years came to excel in the production and identification of gesneriad seed. She became a resource for the scientific community when specific information on growth habits or seed characters was needed, as well as for the horticulture community whenever even the simplest growing information was requested.

Maryjane joined AGGS around 1975 and attended her first AGGS convention shortly thereafter. In 1977 she became a charter member of the new Frelinghuysen Arboretum Chapter in New Jersey. She was a mainstay in our chapter for over 25 years, and served in most every job but focused on propagation and plant sales. As treasurer, she channeled much of the chapter's hard-earned funds into worthwhile donations to AGGS, the GRF, the Arboretum, and many other local horticultural needs. While working hard, she delighted in making things fun – who can forget our symbolic Frelinghuysen flamingos?

Maryjane truly earned her 1997 Award of Appreciation from AGGS. What she accomplished in improving the quality and quantity of the Seed Fund is legendary. She grew gesneriads that others might only dream about. At conventions and local shows, best in show and sweepstakes awards were common for her; but she grew, not for the ribbon awards, but for the reward of sharing growing experiences. She lectured formally when pressed into service, but willingly shared information with individual growers whenever asked. She joined the staff of THE GLOXINIAN and wrote articles, proofread, and consulted to help make the quality publication we enjoy today. She used her growing and marketing skills to produce unbelievably successful plant sales, setting and breaking records at local shows and convention sales. She was elected an AGGS Director and added fresh ideas and concepts to Board meetings always trying to improve our society.

In addition to her plant-related accomplishments, Maryjane befriended many people around the world who shared her passion for gesneriads. She encouraged others, giving freely of her time and expertise as well as her plants and precious seeds. In the almost 25 years I knew Maryjane, we bonded and shared our common interest and love of all things GESNERIAD. I received strength, comfort and encouragement from her and benefited from her wisdom and her wit. My life has been enriched by sharing so many experiences, feelings, and joyous times with her ... and by having this extraordinary woman as my best friend.

Carol Callaghan (Delaware, USA) — The gesneriad world has suffered an incredible loss with the death of Maryjane Evans. She was a gracious and generous person, always willing to share her time and knowledge of our favorite plants. One time when I sent seeds and seed pods in a little jewelry box, Maryjane replied, "How appropriate since gesneriads are such jewels". The Delaware judges remember meeting Maryjane at the 1988 Convention in New

Brunswick, NJ where she exhibited large, beautifully grown hanging baskets including *Aeschynanthus* 'Big Apple'. But our best memories are of the 2002 Convention in Morristown, NJ where Maryjane was such an integral part of the whole convention. She may have dressed like a flamingo, but if this was her swan song, it was spectacular. Maryjane, you will always be remembered!

Carolyn Ripps (New York, USA) — When I think of Maryjane, I will always remember her wry sense of humor, her kindness and her generosity with plants and cuttings. She was a wonderful grower, but more important a wonderful person. I will never forget all the fun times we shared on GRF trips to Mexico and South America. Whenever a gesneriad was spotted, she raced over and checked whether it had viable seed for the Seed Fund. Undeterred by rain, mosquitoes, ants or chiggers, Maryjane took great delight in seed collection. I can picture her bent over the processing table by the dim light of evening, squashing *Codonanthe* berries and splitting *Sinningia* capsules. Her legacy will be the wonderful Seed Fund we have and the glorious plants we can grow because of her efforts.





Maryjane enjoying gesneriads in her greenhouse and processing seed in the rainforest

Marilyn Allen (British Columbia, Canada) — When I think of Maryjane, I remember how, back in the 1980s and early 90s when I was interested in growing species gesneriads and sought them out at conventions, I was asking everyone about cultural conditions and growth habit. Occasionally I got the information I was looking for, but most of the time the response was, "Ask Maryjane". Similarly, if seedlings grown from the Seed Fund didn't perform according to expectations, it was Maryjane who had the knowledge and was so willing to share it. She will be missed. We can all keep growing the species, and support those who collect them from the wild to prevent their loss forever.

Marlene Beam (Colorado, USA) — I barely knew the delightfully witty Maryjane when, by priority mail, I sent her a ridiculously wrapped package of seed, mostly tons of chaff. She recognized my cry for help and shared her expertise. I finally learned to pollinate, wait until seed ripened, and collect some real

seed. She was certainly a cultivated teacher. Later she became special to me in other ways and reached out across the miles. She told me seed sharing was like plant sharing. She definitely shared her fruitful findings from the field: she cleaned the seed, sowed the seed, grew and flowered the plants, pollinated the flowers, and harvested the seed – no easy task. She shared with the world.

Alan LaVergne (California, USA) — We shared a passion for seeds. At my first GRF seminar, we were all asked what our favorite gesneriad was, and I answered, "a seed". "Good boy!" said Maryjane, beaming. She gave a wonderful talk on gesneriad seeds at the 1995 Convention, and I kept her display of gesneriad seed capsules for several years after that. Whenever anybody on Gesneriphiles would mention having set seed on a gesneriad or collecting seed for the Seed Fund, she would shoot back a message of encouragement and congratulations. Even after she had relinquished her stewardship of the Seed Fund, she continued to cheer on others who were making and donating seed. The last message I got from her mentioned that she had not yet gotten to see the flowers from the new collection of *Sinningia guttata*: "I keep cutting the crowns off to propagate them!" That was our Maryjane.

Patrick Worley (California, USA) — Maryjane was always ready to help and was so generous with her heart and her knowledge. We shared really awful shaggy dog stories, trying to out-do each other with the biggest groan. We both like to laugh, and we laughed a lot. Maryjane was a very special person to me. I love her and I miss her. I am taking tomorrow off to be in my greenhouse, read some messages that we sent back and forth and just enjoy the day with memories of my friend. I still have many packets of seed with her personal messages and plants of "extras", begonias and fern seed and spore that she collected for me while she was on the GRF trips. I am numb right now but I smile through the tears when I think of her smiles and laughs. Maryjane, you made my life richer and were a real friend to me.

Ray Milewski (Pennsylvania, USA) — "Seed Central" — that is what Maryjane Evans came to call her dining room table as it became covered with drying fruits, later to be emptied of their precious seeds. All the paraphernalia required for processing seeds – paper plates, glassine envelopes, tissue paper and sundry other materials – could be found in the dining room.



"Seed Central" – Maryjane's dining room table looked like this for many years

Back in 1989 when Maryjane become chair of the Seed Fund, she called to recruit me as a supplier of seed. In time she would set up a worldwide network of people who produced seed and supplied it to the Fund. She instituted the present practice of acknowledging the people who donate to the Fund. Of course, she, herself, was the greatest contributor of seed.

In those days THE GLOXINIAN was published every two months. So every two months I would drive to her home with packets of cleaned seed. She tended to have me specialize in the larger plants such as *Dalbergaria* or *Drymonia* that could be accommodated in the greenhouse here at East Stroudsburg University. Each of these trips was rewarding as we exchanged information on techniques for successful pollination and setting fruit on a variety of gesneriad genera. Some of her suggestions led to nice little projects here at school in which students produced seed on *Primulina tabacum* and various *Saintpaulia* species.

As the years went by, the number of pages of the published Seed Fund list increased. Through Maryjane's efforts it became the extensive list it is today. One sees the AGGS Seed Fund praised in other horticultural publications. Recently I was lucky enough to spend a Sunday reminiscing with Maryjane about those earlier days. Maryjane had a sharp mind and a great memory for all things having to do with gesneriads. She had a *Paradrymonia densa* on her light cart that had just finished blooming. I commented that it would be nice to know how to set seed on the plants. She laughed and reminded me that I had set seed on that species in the early 90s. There she was, always quick to compliment her seed suppliers.

Sue and John Hodges (Australia) — I first 'met' Maryjane in the early 1990s when she was the AGGS Seed Lady. At the 1995 Convention in Millbrae I got to meet her in person when she lost no time in introducing herself and starting to talk seeds. While great distance separated us there was friendship, and John and I enjoyed renewing it at the conventions in Nashville and Tampa. Many Australian growers are probably unaware of the debt they owe to Maryjane. Gesneriad growers here are a very small group and new material is very difficult to obtain. Without her dedication to the Seed Fund, our collections would certainly be smaller and much less diverse. John and I will miss her cheerfulness, her sharp wit and her willingness to share both her plant material and her knowledge, and I will continue to battle with her *Achimenes glabrata* – I'm sure she grew it to perfection as she did so many other gesneriads.

Toshijiro Okuto (Japan) — More than ten years ago, I found Maryjane's message attached to my order from the Seed Fund that said "enjoy your trip to South Africa". I was going to visit Martin Kunhardt then, and Maryjane might have heard it from him. This was the beginning of my correspondence with her. We've exchanged plants and information about gesneriads, although I received much more than I gave, and we chatted over ordinary topics, too.

When Chiritas were becoming popular, she asked me to send seeds for the Seed Fund. I reaped as many seeds as possible from my *Chirita* species and hybrids, and that encouraged me to cross more Chiritas like *C.* 'Aiko' or *C.* 'Keiko'. She also encouraged me to attend the AGGS conventions, starting in Nashville, and I have done so since. She spared her time to take care of me, introduce me to many people and even drove me around sightseeing. Early one morning during the convention in Morristown, I had the privilege of visiting her home – I was so happy and excited to see "the home of the Seed Fund". But I do so regret that it was the last convention we saw her. Thanks, Maryjane.

Ben Paternoster (Long Island, NY, USA) — Reflecting upon my relationship with Maryjane over the many years I have known her led me to the conclusion that the relationship has been both challenging and wonderful. I

admired her knowledge of the gesneriads she so loved and her dedication to furthering the goals of AGGS. She set a standard for all Seed Fund chairpersons to equal that was absolutely the highest possible. She was kind and generous to all who counted her among their friends.

At the same time, Maryjane was no fan of flower shows and the judging of plants. Decisions that were made by judges often drove her up a wall and she would be sure to share her thoughts with me on these matters. These moments could be very challenging for me, but any discussion with her about gesneriads was a wonderful experience. Yet, it was to Maryjane that we turned before the judging of each convention flower show to make sure that all entries were correctly labeled. Then there were the times when I would try to persuade her to give a program to the Long Island Chapter or write an article for *Appraisal*. This was challenging too because she disliked speaking before groups or writing articles. When I succeeded, such as the time that she gave a Seed Workshop at the Second Northeastern Regional Convention on Long Island in 1994, the result was wonderful.

Our challenge now is to make sure that gesneriad lovers who will not have the pleasure of personally knowing Maryjane will know her through us. We will honor her memory best by seeing to it that donations of seed to the AGGS Seed Fund increase each year. Wouldn't that be a wonderful tribute to our Maryjane!

Jan Murasko (New Jersey, USA) — My lightstand holds eight trays of "Maryjanes" – plants grown from seed she processed and cuttings she distributed at chapter meetings and workshops. She was amazing in her knowledge, ability and spirit. I treasure my "Maryjanes"! She will be greatly missed.

Judy Padalino (New Jersey, USA) — I can remember going to the sales table at our monthly meetings to see what new or unusual plant material Maryjane had brought to share. She was always encouraging me to try something different and I usually came away with several interesting plants. Because of her passion for the Seed Fund I have also been able to grow a great variety of gesneriads from seed. Whenever I walk into my plant room or work on my plants, I'll remember Maryjane. She got me to love growing gesneriads because she loved them. Maryjane, you will be missed, but never forgotten.

Alain Chautems (Switzerland) — For many years I received so much from her. She never forgot to send me a birthday card since we had a small celebration during the New Orleans AGGS Convention. Very kindly and efficiently, she always provided me any seed, capsule or pressed plant I would need for my research. She had a tremendous skill for observing plants she grew so nicely, but always talked about her interest in a quiet and humorous way.

Leong Tuck Lock (Malaysia) — I got to know Maryjane via the Seed Fund. We corresponded for some 13 years and throughout those years, her enthusiasm for gesneriads never diminished. She was a fountain of information, giving me ideas about seeds and gesneriads and even hinted how I could help AGGS and THE GLOXINIAN. Also, she became a friend. Her trip with Jeanne to Malaysia was a wonderful opportunity for me to learn from her about gesneriads in general, characteristics of gesneriads and how to spot a gesneriad. I got to know this generous and friendly "seed lady" and icon of AGGS. Later that year she invited me to speak at Convention 2002, and I'm glad I made it. It was nice to see her and to have some time together. Of course, the great success of the "flamingo" Convention was one happy event, and it meant a great deal to her. It is indeed very sad to lose such a valuable member and friend of AGGS. She will stay in my memory for a long, long time.

Ed Cramer (Illinois, USA) — I never had the privilege of meeting Maryjane in person, but over many years, I knew her through the Seed Fund. I think that she contributed so much through her effort of supplying all of us with gesneriads that were otherwise unobtainable. She did a great job – and whenever I think of AGGS, I think of Maryjane Evans.

David, Colleen, and Nolan Turley (Virginia, USA) — We first met Maryjane at the 1988 New Brunswick Convention. We were immediately struck by her outgoing and welcoming nature. Maryjane is well remembered for her perfectly grown show plants and her knowledge of gesneriads in general. Despite a knack for perfection in growing for show, Maryjane cared little for the ribbons that so many growers craved. She once said that a box of assorted ribbons should be place by the door at a flower show. That way any exhibitor who really wanted one, could simply take one. Such a procedure would surely reduce the disagreements over judges' decisions so often encountered at judged shows!

Maryjane was extraordinarily generous both with her plants, and her knowledge about them, but there was much more to being her friend than that. She was a generous and thoughtful person. After Nolan's birth she rapidly became an "adopted grandparent". She never failed to think of Nolan and sent gifts regularly at holidays such as Valentine's Day, Easter, and Christmas. Maryjane was a frequent traveler and there were abundant cards, stuffed animals (often a flamingo) and books arriving at our home from her travels. Nolan always knew AGGS Conventions as the trips when he would see "Miss Maryjane". Often her first greeting upon seeing us was "Where's my buddy?"

Maryjane's prowess at editing was well known. She was always eager to help proofread new additions to the AGGS web site. After a time, I stopped asking her to check over new pages. Not because I didn't want her input; I simply knew she'd automatically check it out and let me know of all my mistakes. Whenever I didn't hear from her, it was only because she was traveling or ill. At AGGS Board meetings we often shared a laugh at the amount of coffee we needed to get through the meetings and would often exchange sympathetic glances when things started to drag on.

Since our first meeting was when her chapter hosted the AGGS Convention, perhaps it is only fitting that our last meeting with Maryjane was back in New Jersey when the Frelinghuysen Chapter hosted the 2002 Convention.



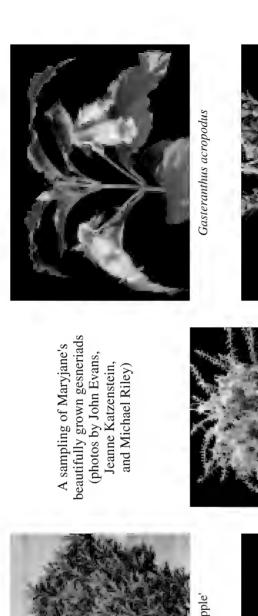
Maryjane at Plant Sales at the 1988 Convention in New Brunswick NJ

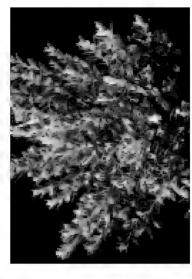


Maryjane with Nolan Turley at the 1999 Convention in Nashville TN



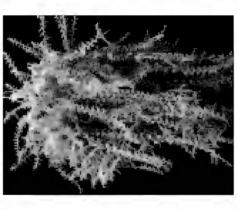
Maryjane and John Evans at the 2002 Convention in Morristown NJ

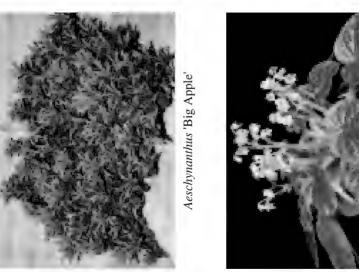




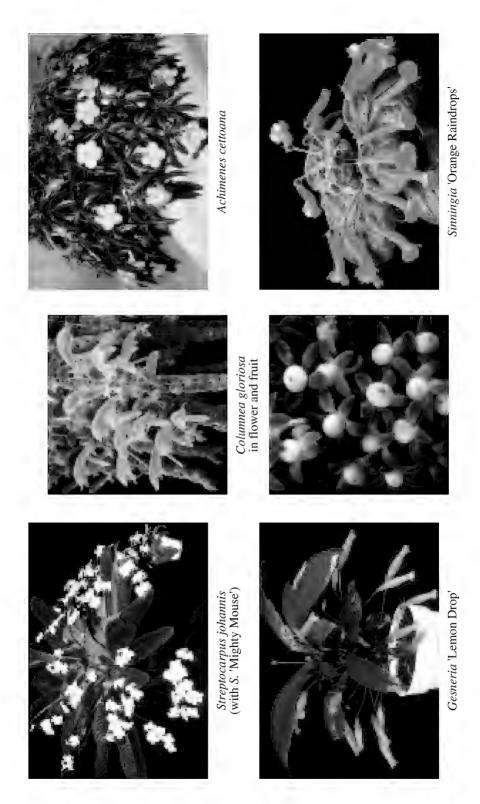
Nematanthus gregarius

Columnea 'Goldheart'





Petrocosmea parryorum



Third Quarter 2003

Arleen Dewell (Vancouver, Canada) — What can you say about a lady whose commitment to the preservation and propagation of all things "Gesneriad" knew no bounds? A lady whose generosity of spirit and depth of knowledge touched all of us who were fortunate enough to cross her path. Every question asked of her by newcomers and seasoned growers alike was always answered thoughtfully, respectfully and with great sensitivity. I will forever hold dear my memories of Maryjane's witty utterances during her excellent presentations. She was able to dream up countless novel ideas that reminded us to donate often to the AGGS Seed Fund. Remember the "Seed Fundus Contributorus" years at convention?

The task now falls on our shoulders to carry forward Maryjane's extraordinary legacy – each in our own way. Resolve to pollinate a gesneriad flower and harvest the seed for donation to the Fund. Plant a few of them yourself and grow out the seedlings in her honour. Nurture new members in your chapter and bring to them the gift of your love and enthusiasm for gesneriads. She will be so proud of us.

Monte Watler (Toronto, Canada) — Not only has the Gesneriad World lost an enormity of knowledge, but I, like many others, have lost a very dear friend. Although I knew Maryjane for a long time, our friendship only started shortly after she took over the Seed Fund. She had procured 3 or 4 varieties of a genus (the name of which I cannot recall), but with the stipulation that each member would only be allowed to purchase one variety. I promptly got 3 or 4 other members to agree and sent in an order with the varied names in order to receive a package of each variety. Maryiane was amused and wrote me a letter telling me that she was impressed and complimented me on my wilyness. According to her, she was so impressed that she was sending me an extra packet of seeds. Whenever we would meet after that she would always tease me about my craftiness and would end up having a drink together. This habit eventually developed into a tradition where, at each convention, we would meet at the cocktail party prior to the awards banquet. It was an opportunity for us to spend a short time together and for me to enjoy her dry sense of humour. She always saw the funny side of a situation. Even if it had been something to displease her she would see something comical in it and we would have a chuckle.

I shall miss her terribly and for me, like many others, there will always be that vacuum. I shall always feel her presence at convention time but I am sure she will be there in spirit. Indeed I shall miss her affection and warmth but I consider myself blessed to have known her even if only for a few brief years. One thing for certain, from now on there will be a lot more flowers in Heaven. We loved you, Maryjane, and we shall miss you.

Michael Riley (New York, USA) — Maryjane touched our lives in so many ways that we can't possibly recount all of them in these pages. For every story we hear, there are scores that remain untold because Maryjane had very personal relationships with everyone. Maryjane's life was not always a bed of ... gesneriads – she had trials and tribulations, particularly with her health. But her intellect and an acute sense of humor not only "got her through the day", she was energized by the positive aspect and value of any experience. She was fiercely competitive, with herself and her own high standards. She inspired us all by planting a seed.

Help Everyone Grow – Donate to the Seed Fund!

The Gesneriad Research Foundation Herbarium and the Hans Wiehler Legacy

John R. Clark < johnclark 74@yahoo.com> Research Consultant, Marie Selby Botanical Gardens

Introduction

In the spring of 2002, Hans Wiehler, founder of the Gesneriad Research Foundation (GRF), offered to donate his herbarium (known in botanical circles as GES) to the Marie Selby Botanical Gardens herbarium (known in botanical circles as SEL). Dr. Wiehler was in the process of moving, and having worked on staff at Selby Gardens during the 1970s and early 1980s, thought SEL the best place to incorporate the GES herbarium. In April 2002, the complete GES collection was transferred to SEL.

The diversity of gesneriads in the GES collection makes it a scientifically valuable botanical resource worthy of preservation for future research. In all, the GRF herbarium consists of approximately 2000 field collections, many greenhouse-collected specimens, 2000 or more flowers preserved in alcohol and more than 30 type specimens. (See the inset box, "What is a type?" for an explanation of type specimens.) These collections were made by Dr. Wiehler and GRF Study Trip participants primarily between the years 1970 and 1999. GRF expeditions conducted throughout tropical America included individual and group trips to Bolivia, Brazil, Colombia, Costa Rica, Ecuador, Guatemala, Mexico, Panama and Venezuela. Many specimens remain undescribed including undoubtedly new species. On these trips, gesneriads were collected for preservation as dried plants and/or pickled flowers. Live cuttings and seed often were collected and used to establish the GRF living collection from which additional herbarium and alcohol-preserved specimens were made.

To make the GES collection more accessible to botanists around the world, Selby Gardens botanists have been working to process (curate) and incorporate the collection into the SEL herbarium. The large numbers of specimens first need intensive curation before incorporation will be possible. Many specimens require mounting and labeling. The pickled specimens need more durable lids and most jars will need new labels. In addition, all of the information about the collection will need to be entered into the SEL herbarium's on-line database to facilitate access by researchers worldwide. The following GRF project schedule is set to prioritize curation efforts.

Project Schedule

The GRF project is divided into three phases: 1) initial sorting and filing; 2) curation and distribution of the type collection; and 3) curation and incorporation of the entire collection.

Phase 1 — Sorting and filing began when Selby Gardens took possession of the GES collection in spring 2002. Initially, specimens were frozen to destroy any pest insects that otherwise would jeopardize the entire SEL collection. Following freezing, specimens were transferred to herbarium cases in the SEL herbarium in the Stark Botanical Research Center at Selby Gardens. When I arrived in October of 2002, we began sorting and alphabetizing the collection. Jeanne Katzenstein volunteered her time to borrow and

What Is a Type?

- A *type* specimen is a preserved plant that is cited by the author of a new species at the time of its description. The type then serves as a model in defining what the species is.
- A *holotype* is the primary type specimen; there is only one holotype for each described species.
- An *isotype* is a duplicate specimen of the type collection that is usually distributed to other herbaria; none or several isotypes are designated depending upon how much material is available from the original collection.
- A paratype is an additional specimen that is cited in the original description as being the same species but is not from the original type collection. As with isotypes, none to several paratypes can be cited depending upon the number of specimens of that species available to the author.
- When a type is lost or destroyed, a new type can be designated as a replacement. If material that was cited in the original publication exists, such as an isotype or paratype, one of these can be designated as a *lectotype*. If no specimens exist that were cited in the original description, a *neotype* can be designated from other collections that represent the same species.



Gasteranthus atratus was described in 1978 by Hans Wiehler. Ten type specimens are being distributed to institutions around the world as part of this project. (photo by John R. Clark)

photocopy all Dr. Wiehler's field notes. These notes were used to identify and label many specimens that previously had been labeled with only collection numbers. During this process, we also began sorting out specimens that had been on loan from other institutions. These loaned specimens were then returned to the herbaria from which they came.

Phase 2 — completed in March 2003, consisted of locating, databasing, imaging and curating the type specimens in the GES collection.

We first conducted a literature search, with the aid of a Gesneriad Database developed by Larry Skog of the Smithsonian Institution, and found that 155 type gesneriads were recorded as being in the combined GES/SEL holdings. Of these, 148 type specimens were described by Dr. Wiehler. We then consolidated these specimens; SEL types already were filed in the SEL type collection and the GES specimens were separated from the GES collection during phase 1 of the project. The GES specimens were then entered into the SEL herbarium database from which we generated a master list that detailed the published distribution of types.

For many species described by Dr. Wiehler, types had not yet been fully distributed as described in the publication of those species. For example, *Gasteranthus atratus* was published as having one holotype and nine isotypes distributed to ten institutions around the world. These types had never been distributed, however, and remained in the GES collection. Our job was to identify these and other species' types and distribute them to the specified herbaria as published. Fortunately, Dr. Larry Skog had spent several years visiting herbaria around the world verifying type gesneriad collections. His data showed which species' types had been distributed and those that remained to be sent. We thus used this data to focus our search within the GES collection for the missing and undistributed specimens.

In all, 136 of the 148 type collections are accounted for and distributed to the appropriate herbaria. The missing 12 collections could not be located and were apparently never made. For these species, we have designated two *neotypes* and 10 *lectotypes* to replace the missing specimens.

All types in the SEL herbarium possession (except for a few that are on loan to other herbaria) have been digitally scanned. These images will soon be available on the Selby Gardens website (www.selby.org). An annotated checklist of all gesneriad species with types now at SEL, along with the newly designated types and other changes, has been submitted for publication in the research journal *Selbyana*.

Phase 3 — consists of 1) database entry of the Wiehler field notes; 2) generation of labels from these entered field notes; 3) mounting of specimens for SEL; and 4) distribution of duplicate specimens, with labels, to other institutions. This phase will take up to a year to complete if funding becomes available to do the work. We have, however, initiated data entry of the field notes into our database. This process, projected to be completed by summer 2003, will allow us to begin generating labels for the collection. Completion of Phase 3 depends on the availability of funding and personnel to continue the work in the upcoming year.

Conclusions

When curation and data entry are complete, the GES collection will be an indispensable resource as botanists and other researchers continue to study the Gesneriaceae and the tropical ecosystems that they inhabit. The ini-



Columnea zebranella Wiehler, one of the 148 species described by Hans Wiehler, on deposit at SEL (photo by John R. Clark)

tial phases of this project have been completed. The valuable type collections have been curated and distributed and the entire collection has been prepared for Phase 3 of the project. Much work is still needed, however. Although these tasks may take several years to complete, we plan to continue curating the collection as time and funding allow. Additionally, many specimens within the collection represent new species waiting to be described and will thus require intensive scrutiny by gesneriad experts. In all, the GES collection represents valuable data that needs to be shared as well as a wealth of information that has yet to be explored. At Selby Gardens we are committed to this work to assure that Dr. Wiehler's contributions to botany soon will be available to the entire scientific community.

Acknowledgements

This research was funded, in part, by a grant from the Elvin McDonald Research Endowment Fund of the American Gloxinia and Gesneriad Society with a matching donation provided by the Frelinghuysen Arboretum Chapter in New Jersey. Additional support was provided through a generous donation from Marge Schmeil (Selby Gardens member and volunteer) and by funding from the Marie Selby Botanical Gardens International Interns Program. The Frank E. Duckwall Foundation, Inc. supported the imaging of the type speci-

mens. An anonymous donor also contributed greatly to this project. Jeanne Katzenstein is acknowledged for her time and efforts in acquiring GRF field notes and for coordinating collaboration between SEL and Dr. Wiehler, before his death in March 2003. We also acknowledge the volunteer support of Carol Collier, Vivienne Jefferies, Nancy Leer, Karen Shunk and Patsy Worley with the curation and data entry related to this project. Lastly, we thank the Friends of the Gesneriad Research Foundation (Linda Massey, Melissa McDowell and Jerry Trowbridge) for their guidance and support with this project.

Correction / Omission

On page 57 of the 2nd Ouarter Issue of The GLOXINIAN (53:2:57) the following was omitted above the picture of the Frelinghuysen Arboretum Chapter members:

"Money well earned ... money well spent"

"In 2002, members of the Frelinghuysen Arboretum Chapter celebrated both their 25th anniversary as well as a very successful AGGS Convention plant sale which made possible their recent donation of \$2,600 to Selby Gardens, matching the AGGS Research Endowment Fund grant, to continue the work on the GRF herbarium project."

Any individuals or organizations wishing to further support the GRF/Selby herbarium project may send donations to Selby Gardens, Attn: Rita Aughey, 811 South Palm Ave., Sarasota, FL 34236-7726, and specify "Gesneriad Project". Donations to the AGGS Elvin McDonald Research Endowment Fund may be sent to Helen Bortvedt, AGGS Treasurer, P.O. Box 2584, Sequim, WA 98382-8870.

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Memories of Hans Wiehler

Much of the history of the Gesneriad Research Foundation appeared recently in The Gloxinian. What follows are some personal memories of Hans Wiehler excerpted from a few of the emails written by colleagues and friends to his family and to AGGS —

Dr. Carl and Jane Leur (Florida, USA) — Hans came into our lives in the early spring of 1973, just 30 years ago. As a Ph.D. candidate under Cal Dodson, Hans came from the University of Miami to Sarasota where we were just beginning Selby Botanical Gardens with Cal as the director. Jane and I did not know what a gesneriad was, but we soon learned. I remember incorporating a gesneriad in our official logo at his suggestion as I drew the logo on our kitchen table. The gesneriad took its place with an orchid and a bromeliad which were to become known as our classical epiphytes, symbols of our research. In the early years, Hans worked with all of us on the many facets of creation of the garden, including clearing trash and weeds and planning the location and layout of the greenhouses.

Over the next few years, Hans amassed a fabulous collection of living gesneriads that filled one large greenhouse. It was by far the largest and finest collection in the world. Many scientists visited Selby Gardens just to see Hans' gesneriads. He took meticulous care of them, and produced prize specimens. He collected many specimens personally in tropical America, and described dozens of new species. Within a few years he was awarded his doctoral degree.

Some years later under another director at Selby, it was decided that the gesneriad collection did not generate enough money to justify its maintenance. The collection was reduced to a few plants, and the greenhouse was used for other purposes. Independently, Hans bought a large house and lot in a nearby neighborhood, and began the GRF, the Gesneriad Research Foundation. Loyal volunteers followed Hans as he rebuilt a gesneriad collection. In the yard beside the house he created a tiny bit of rainforest with tropical trees, palms, shrubs, and epiphytes under an extensive watering system. Even after he learned that he had a serious problem with his health, he continued until he was no longer able. There will never be another Hans.

Prof. Dr. Anton Weber (University of Vienna, Austria) — I was in contact with Hans for about 30 years, not always very regularly and sometimes with long interruptions, but in a steady way. Personally, I met Hans only once, when he organized the first Gesneriaceae meeting in Sarasota. We had already been in contact before this meeting, and, as I came from overseas and the flight was expensive, I even had the privilege to stay in Hans' house. We became friends immediately. Hans proved an enormously nice and helpful man. It is a great pity that I did not manage to come over a second time when Hans had established his Gesneriad Research Foundation. I also regret that I did not grasp an opportunity to participate in one of his excursions to South America. I am convinced that this would have been a great pleasure and a great opportunity to learn a lot about neotropical Gesneriaceae from a first-class expert. Now it is too late.

Without a doubt, Hans was an extraordinary man and unconventional scientist. I know that he was offered a university career but he refrained in





Hans enjoying gesneriads in the GRF greenhouse and in the rainforest

order to stay independent and to spend his time exclusively on research. The foundation of the GRF was a significant step to ensure independence. I was happy to learn that he managed to fill so many persons with enthusiasm on gesneriads. I remember well that, when Hans published his first contributions to the taxonomy of Gesneriaceae, people were skeptical and sometimes shocked by the unorthodox taxonomical changes in generic concepts. Hans did no longer rely on similarities in flower shape as indicators of relationships. He was the first gesneriologist who realized clearly that flower shapes and colours are very plastic in relation to pollination reqirements and tell us little about relationships. Now his ideas are widely accepted and his motto "pollination syndromes do not constitute genera" has become a basic truth in gesneriad taxonomy.

With Hans' death, science has lost a significant and unconventional botanist. Myself, I am losing a good friend and cooperative scientific colleague. I will keep Hans in good memory, both from the personal connection and the scientific point of view.

Michael Riley (New York, USA) — We traveled many times through South and Central America on GRF trips and spent many quiet nights in Sarasota discussing the universe. I was an ardent supporter of his work, and probably a thorn in his side more times than he liked, but tried to help keep him on a focused and productive track – not always an easy task. I am grateful that he shared his passion and knowledge of plants with me and so many others. The strength of his work remains, as viable as ever, as does our memory of the man.

Alan LaVergne (California, USA) — So much of what I know about gesneriads I owe to Hans. His patience with beginners was remarkable. His enthusiasm for the gesneriad family was contagious. His ingenuity with limited resources was admirable. His perseverance in spite of hardships was an inspiration.



Hans lecturing at one of the history and biology seminars at the GRF

Elizabeth Varley (Delaware, USA) — Hans was a unique teacher, scientist, friend, mentor, and conservationist the likes of which we will not find again any time soon. When I first met Hans at Selby Gardens many years ago, he was gracious and welcoming, and very generous with his time and plant material to a stranger from another garden. He influenced me to become more active in the world of gesneriads and to join him on three collecting trips to Ecuador and Mexico. As well as my being in awe of his ideas and dedication to the furthering of knowledge about my favorite plant family, my family and I considered him a friend.

Dr. Alain Chautems (Geneva, Switzerland) — I had the great privilege to know Hans for the last twenty years. He was a decisive support for my PhD research in the 1980's and we kept in touch until he was forced to retire. On several occasions he hosted me at the GRF, and we had long conversations on plants or philosophical subjects of all kind. Besides his huge knowledge and experience with the Gesneriaceae, he was a very smart and kind person, a true friend.

Dr. Miriam Denham (Colorado, USA) — Hans was an original thinker. He introduced interested amateurs to the idea of collecting from the wild and the importance of preserving these unusual plants. I received an email recently from someone interested in gesneriads asking where will we find someone to do the "splitting" that Hans did so courageously. He left a tremendous legacy in the gesneriads, both in publication (including line drawings which are so useful) and in collections of living plants.

Susan Grose (Kansas, USA) — I was never able to go on one of his collecting trips nor attend any of the GRF seminars, but wished I could. Of course I have reaped collective benefits with other gesneriad enthusiasts from those many collecting trips and his lectures over the years, including those at AGGS conventions. I share his concern for the destruction of rainforest and wild habitat and hope my voice will add to voices of others in that continuing effort. He has made a large contribution to professional botany as well as to the enjoyment of many ordinary plant lovers. He has left a wonderful legacy and will not be forgotten.

Dr. Martin Freiberg (University of Ulm, Germany) — Hans and I first met in 1991 while I was still a graduate student. Although I was rather enthusiastic already, Hans really confirmed my way, and I got hooked on gesneriads. Over the years we discussed a lot, and I learned to appreciate Hans. Unlike many other scientists, he had a real overview of his field, was open to all discussions and arguments, and was the only one that I know who really fused field work and laboratory work into a synergistic new approach. Hans became a very special personal friend and supported me in whatever he could.

Dr. Meg Lowman (Director, Selby Gardens, Florida, USA) — Hans was a friend and a mentor to me in my eleven years in Sarasota. As plant lovers, we enjoyed many hours of passionate conversation about collecting, exploring, and most of all, planning for the Sarasota rainforest garden that was Hans' dream. He will be missed but his legacy will live on in all of us who knew him here at Selby Gardens and beyond. We are creating a small memorial for him here.

Jeanne Katzenstein (New Jersey, USA) — Hans provided a unique opportunity in 1986 when he first sought participants to help study gesneriads in the neotropics. I joined his group on the first trip to Ecuador, and he made the experience so fulfilling and enlightening that I joined him on the fourteen other GRF trips. He was a great teacher and shared his knowledge freely. Wanting to absorb as much as possible, I attended all the history and biology seminars he presented at the GRF. His enthusiasm for gesneriads was contagious – it was pure pleasure to hear him tell stories about specific gesneriads in the wild as well as the experiences he had studying and growing them over his long career. Those of us who became involved in the GRF all consider ourselves part of Hans' extended family – we shared so many wonderful times together and learned from each other. My life was made richer for having known him.

Melissa McDowell, Linda Massey, and Jerry Trowbridge (Florida, USA) — Hans was more than a friend to us over the twenty-plus years we worked as volunteers at the GRF. We became a close-knit family and his departure is a major loss to us. We are happy and proud to know that in some ways we helped him accomplish all he did. He was always eager to share his bounty of knowledge from which we benefited greatly. In short, Hans, you are dearly missed.



Hans with Friends of the GRF in November 2002.

The History and Biology of Nematanthus

(Partial reprint from a 1998 GRF Seminar handout prepared by Hans Wiehler and Alain Chautems)

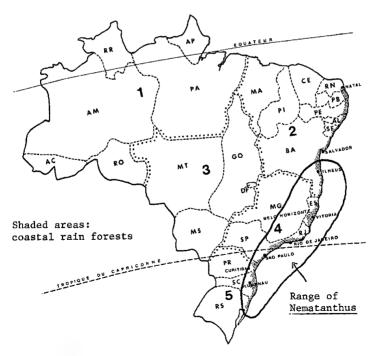
Establishment of the Genus — Nematanthus Schrader, 1821, in: Göttinger Gelehrte Anzeigen I:718.

Type Species — Nematanthus corticola Schrader, ibidem: 718.

Etymology — From the Greek *nema* = thread or *nemato*- = thread-like, and the Greek *anthos* = flower, thus the name thread flower, an allusion to the unusually long pedicels (flower stems) within the genus, but especially in *N. brasiliensis*, *N. corticola*, *N. crassifolius*, *N. fluminensis*, *N. fritschii*.

Distinguishing Generic Characters — In order of importance: 1) epiphytic habit; 2) fruit a fleshy, two-valved display capsule (not a berry!); 3) chromosome number: n = 8; 4) presence of a multiple hypodermis on the upper leaf surface (under the epidermis); 5) distribution limited to southeastern Brazil; 6) corolla tube: a) red or yellow, with a ventral, hypocyrtoid pouch and narrow opening; b) or tube red or yellow, elongated, funnel-shaped, and laterally compressed; 3) or tube white, large, bell-shaped, with a large opening.

Geographical Distribution — Southeastern Brazil, predominantly within the coastal rainforest, between sea-level and 2000 m altitude. Four species grow further inland: *N. lanceolatus*, *N. sericeus*, *N. crassifolius*, and *N. strigillosus*.



Map of Brazil showing the range of the species of Nematanthus



Top row left to right: N. bradei, N. serpens, N. fornix, N. gregarius
Center row left to right: N. hirtellus, N. maculatus, N. fissus, N. tessmannii
Bottom row left and right: N. fritschii and N. crassifolius
(photo by Alain Chautems)

Number of Species — 30. Published species include:

N. australis	N. fornix	N. maculatus	N. striatus
N. bradei	N. fritschii	N. mattosianus	N. strigillosus
N. brasiliensis	N. gregarius	N. mirabilis	N. teixeiranus
N. corticola	N. hirtellus	N. monanthos	N. tessmannii
N. crassifolius	N. jolyanus	N. sericeus	N. villosus
N. fissus	N. kuhlmannii	N. serpens	N. wettsteinii
N. flumimensis	N. lanceolatus		

Unpublished species include:

N. albus (ined.) N. aff. albus (ined.) N. kautzkyanus (ined.) N. punctatus (ined.)

Habit — Epiphytic subshrubs of the open rainforest with ascending, climbing, pendent or trailing stems, suffrutescent (woody) at the base. The opposite leaves often succulent.

Habitat — The species of *Nematanthus* are usually found on the lower branches of trees, or on trunks of trees in the open rain or cloud forests, at the edges of forest clearings, along creeks, or over rivers, and sometimes on rocks. *N. strigillosus*, however, grows exclusively on rocks. Three of the species, *N. corticola, N. fissus* and *N. maculatus*, are found below 500 m altitude. Three quarters of the species are found between 500-1200 m altitude, and *N. fornix, N. australis* and *N. strigillosus* prefer higher altitudes, 1300 to 2000 meters. *Nematanthus fornix* even survives freezing temperatures.

Nematanthus ... and How I Got Involved

Dr. Alain Chautems <alain.chautems@cjb.ville-ge.ch>
Conservatoire et Jardin botaniques de la Ville de Genève C.P. 60
CH-1292 Chambésy/GE Switzerland

Liventy years ago I organized an expedition in Brazil to collect *Nematanthus* and its allied genus *Codonanthe*. That first trip in March-April 1983 sparked my long-standing involvement with this country and the Gesneriaceae family. The story actually began at the end of 1979 when my former botany professor called me about a teaching assistant position and proposed PhD research. He directed me to Dr. Antoine Reist, a researcher at the Horticulture Department of the Swiss Federal Agriculture Research Station who, at that time, was interested in obtaining a wider selection of houseplants for the local market. Dr. Reist had begun to grow *Nematanthus* and *Codonanthe* from cuttings sent by Bill Saylor and other members of AGGS (including some recently produced hybrids, in particular the intergeneric ×*Codonatanthus* 'Fiesta'). I drove some two hours to reach the Horticulture Station and met Dr. Reist and the mysterious plants.

This was the first time in my life I actually saw Gesneriaceae; the only thing I had heard about previously was the ubiquitous houseplant *Saintpaulia*. I was immediately impressed by the colorful and weird-looking flowers of species named at that time: *N. nervosus* (now *N. fornix*) and *N. perianthomegus* (now *N. tessmannii*). Some were still classified as *Hypocyrta*, a genus defined by Martius for the swollen, i.e., ventricose, corollas. A question soon came to mind: How did such diversity originate in a single genus in the remote Atlantic coastal forests of Brazil?

Dr. Reist's idea was to identify the genetics of particular floral traits, but this kind of research did not seem very appealing to me. It would have required the following of selected hybrid offspring, through several generations, in order to trace the inheritance of such traits. When I learned that 12 to 18 months were necessary to go from seed to flowering plant, I immediately saw some serious limits with the five years I had planned for my PhD research. At the same time, Dr. Reist got involved in energy-saving experiments for greenhouse production (remember the oil crises in 1973 and 1979). Official support for his Gesneriaceae research was no longer available, and I was offered his live collection to do whatever I wanted.

My first task was to test relationships between the available species by doing crosses. I also investigated what had been published on these genera, and at the Geneva Botanic Garden library found several papers by Dr. Hans Wiehler. I wrote him several letters, asking for reprints and further explanations, and also inquiring about the relevance of my intended research. He recommended that I concentrate my efforts on the genus *Nematanthus* because it is well circumscribed in Eastern Brazil. At his invitation, I travelled to Sarasota and spent several weeks at Selby Gardens at the end of 1981. The tropical vegetation, the beautiful plants in the greenhouses, and the vast amount of herbarium material there and on loan quickly confirmed that I was on the right track. Hans insisted that field research was the next important step and I would just need to apply for grant money. It sounded strange to me that anybody would pay a Swiss scientist to travel as far as

Brazil to look for a few plants for the sake of their ornamental qualities, but luckily enough I received my first travel grant quite easily.

In preparation for this field trip, about a year was spent looking for local contacts with several museums or universities in Brazil. I discovered a new aspect of research – the tricky and time-consuming paperwork necessary for getting the required visa and collecting permits. This extra time gave me the opportunity to take a Portuguese night-class with a Brazilian teacher. I then built my itinerary based on the few good contacts I was able to establish and planned to start my trip in southern Bahia and then head south through Minas Gerais, São Paulo, Paraná, Santa Catarina and finally Rio de Janeiro, travelling for a total of two months. My first visit was to a local herbarium that belonged to a Cocoa Research Station (CEPEC) funded in the 1960's.

Southern Bahia rain forests are among the most species rich in the tropics but home to only one species of Nematanthus - N. corticola. By coincidence, this species was the basic element for creating a new genus, published in 1821. The long and slender pedicel, which can reach more than 20 cm, made a strong impression on the botanist Schrader who wrote the description and created the name for this genus whose etymology (thread flower "nema" and "anthos") refers to this unusual feature. The species grows as an epiphytic plant on the trunk of trees, again its species name etymology ("corti-" and "-cola" or bark dweller) refers to this. I was lucky to find my first wild species in two different localities in remnant patches of forest. In the 1990's, an intense inventory program started to survey the little amount of untouched remaining rainforests. An active collaboration was set up between CEPEC and the New York Botanic Garden. Funding was obtained from several sources and the project is still active. One of the results was that N. corticola was characterized as a good indicator of wellpreserved forest areas (see http://www.nybg.org/bsci/res/bahia/ Nem-cort.html). Other Gesneriaceae seen for the first time in Bahia were Codonanthe uleana (often associated with ant nests, especially on cocoa trees) and C. gracilis.



Brazilian colleagues from Campinas University with Alain in 1983



Nematanthus gregarius (photo by Mauro Peixoto)



Nematanthus wettsteinii (photo by John Evans)

Typical small-flowered, ventricose types of *Nematanthus* are shown above; below are species of the short-pedicel, resupinate type of *Nematanthus*.



Nematanthus maculatus (photo by Alain Chautems)



Nematanthus striatus (photo by Alain Chautems)



Nematanthus corticola (photo by Alain Chautems)



Nematanthus crassifolius (photo by John Evans)

The species above represent the "thread-flower" types of *Nematanthus* with pendent-resupinate flowers; below are two of the unpublished large-campanulate types of *Nematanthus* with white flowers.



Nematanthus sp. (albus ined.) (photo by Ray Annabel)



Nematanthus sp. (punctatus ined.) (photo by Alain Chautems)

The next area I had planned to visit was Minas Gerais and a mountain area called Serra do Cipó where *N. strigillosus* had been collected in the 1820's at the time of the first botanical expeditions in Brazil. The main vegetation in this montane region (elevation varies from 700 to 2000m) is not rainforest but a formation locally called "campo rupestre", a mixture of hilly grasslands, rocky outcrops and gallery forests. The only contact I had at this time was a brother of my Portuguese teacher, a biology professor who knew the area well but had no experience with Gesneriaceae. The information I had was not sufficient to locate any interesting plants, except for a small population of *Sinningia elatior* I spotted along the road. In Ouro Preto, another contact from the local university and herbarium, Prof. Badini, led me to find *Nematanthus strigillosus*, as well as *Sinningia magnifica* and *S. tuberosa*.

The next stop in my travels was São Paulo with important herbaria to visit and a new contact – Mauro Peixoto. We had started to correspond after I read a letter he published in The Gloxinian telling about a few species of *Codonanthe* and *Nematanthus* growing around his "sitio", at that time just a small hut surrounded by fields and forest where he used to go for the day. (The fully equipped house and greenhouse were still to be built.) After the few weeks spent in Brazil, I had improved my Portuguese a little, but it was good to know that Mauro could also understand English.

Mauro drove me to impressive pieces of remnant rainforest on the slopes bordering the plateau on which the city of São Paulo was established four centuries ago. He showed me the rare Nematanthus bradei, N. teixeiranus, and N. villosus as well as other species more common and better-known to me from my cultivated collection like N. fritschii, N. fissus, N. gregarius, N. maculatus and N. wettsteinii. Codonanthe devosiana was also a frequent sight in the Atlantic rainforest around São Paulo. By this time I was trying to distinguish C. digna and C. paula, but I soon decided to merge the two under the older name, unable to find a clear-cut delimitation. We also often found C. gracilis, somewhat variable in leaf size and in the more-or-less maroonpainted corolla. Another fairly common species was Sinningia douglasii with its epiphytic tuber, but at this time of the year there were no flowers. All those findings were fantastic, but the best discovery was Mauro's enthusiasm for plants. Our long-lasting friendship and complicity around Gesneriaceae had started. With colleagues from the University of Campinas, we located a population of N. striatus. Finally, cuttings and flowers of N. fluminensis were given to me while visiting the herbarium at the "Instituto de Botânica". I was especially impressed by the vigour of this species and its pretty vellow flowers.

Other field excursions followed in the states of Parana and Santa Catarina with the help of local botanists G. Hatschbach and F. Dr. R. Reitz. There I collected *N. tessmannii*, *N. fissus*, and the first species new to Science I would later publish as *N. australis* (inspired by its distribution restricted to southern Brazil).

My last stop was Rio de Janeiro where colleagues from different institutions took me to other nice places such as the Organ mountains for *N. crassifolius* and *N. sericeus*, Itatiaia National Park for *N. fornix* and *N. hirtellus*, and Parati for *N. brasiliensis* and *N. monanthos*. The latter area is likely the main collecting area where the first native Brazilian botanist Br. Joaquim Velloso described several Gesneriaceae in 1829 (manuscript had been started in the 1790's). Several species nowadays put under *Nematanthus* were published as *Orobanche* (a genus defined by Linné in the group of plants with

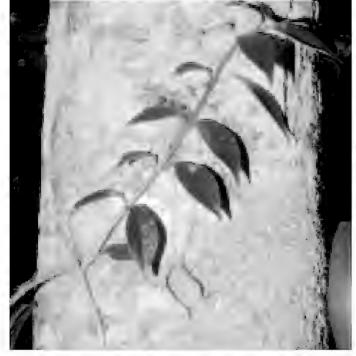
four stamens and being parasitic, i.e. epiphytic, a fact that has long been interpreted as parasitism). The descriptions were complete with line drawing plates of *N. brasiliensis*, *N. fissus*, *N. fornix*, *N. fluminensis*, *N. monanthos*, and *N. serpens*. The fact that some 200 years later I could still find most of these species in the same locality is extraordinary. Good patches of forest still exist due to the steep terrain and the absence of paved road until the last few decades which kept the area free from intense land occupation.

Considering the 25 species I was looking for, this trip was quite successful. I had found one new species and missed only *N. jolyanus*, *N. lanceolatus*, (*N. kuhlmannii*, *N. mattosianus*, those two were later shown to be natural hybrids of *N. villosus* × *N. fritschii* and *N. fissus* × *N. fritschii*, respectively), *N. mirabilis*, and *N. serpens*. Later trips would bring good material of *N. jolyanus* and *N. lanceolatus*. *N. mirabilis* is still only documented by the original herbarium collection in the early 1960's. The locality indicated on the herbarium label refers to a river water-head that so far no colleague in Brazil could spot accurately on a map. In the many local herbaria I have visited, no such plant has been re-collected.

The case of *N. serpens* is different. By the time I completed my thesis in 1985, I had decided that this Velloso name had to be used for material in cultivation introduced by the USDA in 1959 under *N. strigillosus*. My study showed that the true *N. strigillosus* was something different. Nowadays, I have doubts about the true identity of *N. serpens* as I think that it could be an older synonym for *N. sericeus*. Based on my field observations, *N. sericeus* occurs in the area where most of the Velloso species were collected (along an old road linking the gold mines of the interior in Minas Gerais and the Parati harbour, where gold was sent to Portugal). The consequence of this new point of view is that the cultivated material presently put under *N. serpens* would be of horticultural origin as no such material was ever collected in the wild in Brazil. I thought it might be a possible hybrid between *N. gregarius* and *N. sericeus* although it seems to come true from seed. I have lost this material in Geneva and any AGGS member growing it should try to self it to see if this fact can be confirmed.



In 1998, Alain collaborated with Hans to present the updated History and Biology of *Nematanthus* seminar at the GRF



Typical epiphytic growth habit of *Nematanthus corticola* – "bark-dweller" (photo by Alain Chautems)



Typical habit of *Nematanthus fissus* (photo by Alain Chautems)

Some unexpected material appeared at the Rio Botanical Garden. There I was shown some live material recently brought back from Espirito Santo and was asked if it was Gesneriaceae. Based on the leaves, it looked like one of ours, but I could not tell anything more. A cutting was offered to me. I grew it and distributed seeds and cuttings. It turned out to be a plant well known by several AGGS members. I originally assigned it as genus indet. Santa Teresa, based on the large campanulate and white corolla. I was later convinced that it must be placed in the genus Nematanthus based on an accumulation of observations: the typical "display capsule"; fertile hybrids with some other congeners obtained by Mauro; discovery of two more species with large white flowers; chromosome numbers counted by Michael Kiehn in Vienna; and, more recently, molecular results. This means that the genus Nematanthus should be redefined to include this new floral morphology which represent an adaptation to large bee pollination. My recent studies on the tribe Sinningieae confirm that Gesneriaceae are very plastic and able to evolve quickly leading to all kinds of floral morphologies under the selective pressure of different kinds of pollinators.

My trip had been a total success then with this second species new to science and representing a fourth kind of flower morphology – short pedicel with large campanulate and white corolla – in addition to the previously known brightly colored flowers with short pedicel with ventricose corolla or short pedicel with resupinate corolla or long pedicel with large, often laterally compressed corolla. I had also gained a complete vision of the ecology of the genus, from the more uniformly warm and constantly humid conditions of southern Bahia to the seasonal climate of southern Brazil. It is not surprising that some Nematanthus species are rather cold tolerant like N. fornix which is found at high altitudes (near 2000m) or N. australis in the summits of southern Brazil (1000-1500m), Growing at mid-elevations (800-1200m), N. wettsteinii and N. gregarius are also well adapted to cool periods with their small and fleshy leaves. Growing in the lower part of the coastal rainforest, N. fissus, N. maculatus, and N. jolyanus should require some milder and more stable conditions. N. strigillosus, from its more open and montane habitat, probably needs more sunlight than its congeners. N. fritschii, N. teixeiranus, and N. bradei from about the same area in São Paulo should thrive in fairly high atmospheric humidity as they often receive drizzle or spend part of the day in fog or low clouds during most of the year.

The last day of my trip had arrived and as we were heading back from Parati to Rio, I started to feel a strong appreciation for this stretch of coastal rainforest, the magnificent bay dotted by a myriad of green islands surrounded by a bright blue sea. My mind was telling me that I would have to come back – there should be much more to discover here. Luck was with me, and my wishes turned to reality. I visited Brazil in 1984, travelling for five weeks. Receiving a post-doc grant, I benefited from the fantastic opportunity to spend 18 months immediately after the completion of my PhD in late 1985. In the following years, I managed to make annual trips with few exceptions. Each time I explore some of the wilderness treasures of Brazil and discover new or sought-after Gesneriaceae, I get this strong feeling that other trips are needed – to again see my friends and colleagues or make new contacts, hear and speak the soft and relaxed Portuguese, listen to the pleasant music or dance to it. My love at first sight for Brazil is still there ... and it will last for many more years to come.

Coming Events

September 13-14 — California — Delta Gesneriad and African Violet Society dual AGGS and AVSA display and sale at the Sacramento Garden & Arts Center, 3300 McKinley Blvd., Sacramento. Saturday 2-5 pm; Sunday 10 am - 4 pm. Free parking and admission; hundreds of sale plants; free growing advice. Contact Lynn Lombard (530-677-5120) <lordinary.

September 13-14 — Colorado — Gloxinia Gesneriad Growers annual show and sale "Lost Worlds" at the Denver Botanic Gardens, 1005 York St., Denver. Saturday 1- 4 pm; Sunday 10 am - 3:30 pm. Contact Ann Watterson (303-467-2135) <cah2oson@msn.com>.

September 13-14 — Missouri — Gateway West Gesneriad Society show and sale in the Beaumont Room at the Missouri Botanical Garden, 4344 Shaw Blvd, St. Louis. Saturday and Sunday 9 am - 5 pm. Contact Gary Dunlap (636-789-3604) <patspets@jcn1.com>.

September 13-14 — Washington, D.C. — National Capital Area Chapter presents "Houseplants Past and Future", flower show and plant sale at the United States National Arboretum, 3501 New York Avenue, NE, Washington, D.C. Saturday 1 – 5 pm; Sunday 9 am - 5pm. Free parking and admission. Info: http://members.aol.com/aggsncac. Contact John Boggan jkb25@cornell.edu (202-328-8145).

September 20 — Massachusetts — Annual combined plant societies judged show and sale at the University of Massachusetts Eastern Extension Center, 240 Beaver St., Waltham. Saturday 10 am - 3:30 pm. Free admission. Wheelchair accessible. Participating will be the New England Chapter of AGGS and the Buxton Branch of the Begonia Society.

Contact Bob Clark (978-738-6983) <thecopse@yahoo.com>.

September 27-28 — Missouri — Heart of America Gesneriad Society annual judged flower show and plant sale at the Loose Park Garden Center Building, 5200 Pennsylvania Ave., Kansas City. Entries Friday 8:30 - 11 am. Show and sale Saturday and Sunday 10 am - 3 pm. Contact Grace McCurnin <vngmc@planetkc.com> or Susan Grose <sagrose@aol.com>. Garden Center phone 816-784-5300. Flower Show Chair Linda Golubski.

October 5 — New Jersey — Frelinghuysen Arboretum Chapter annual judged show and plant sale at the Frelinghuysen Arboretum in Morristown. Sunday 10 am - 4 pm. Free admission and parking; handicapped accessible. Contact Jeanne Katzenstein (973-627-2755) <jkatzenste@aol.com>.

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Remembering Dave Tyler ...

Dave Tyler passed away on February 16, 2003. He will be missed by his wife, M.J., as well as gesneriad enthusiasts from the Puget Sound Gesneriad Society and from the San Francisco area where he and M.J. were active for many years. Dave, together with M.J., served as the Membership Secretariat for AGGS from 1995-2000. They graciously took over the Membership responsibilities with very short notice and upgraded the computer files of the AGGS membership records. Many people who worked with Dave describe him as a meticulously careful and thorough worker who cared a great deal that the membership of AGGS was well served.

When ill health necessitated the transition of the Tylers' membership responsibilities, Bob Clark stepped in and corresponded regularly with Dave by email and postal mail. Bob recalls, "Dave was very patient, and very thorough in explaining how he kept the database and what exactly it was that he and M.J. did. We corresponded until just a few weeks before his death when he had M.J. ship out the old Jimmy Dates records on diskette so I could peruse, organize and file them into some data that I might be able to use in the future."

Helen Bortvedt, AGGS Treasurer, remembers, "Dave was a personal friend as well as a co-worker in the fields of AGGS. His work was meticulous, and he had a great dry wit. He was interested in everything and knew much more than I did, but he shared his knowledge and I learned a lot from him."

I remember first meeting Dave in 1995 at the AGGS Convention in Millbrae, California. When he and M.J. returned to the San Francisco area for the convention, they both very graciously performed as hosts as if they had never moved away. Dave always had a twinkle in his eye behind his modest manner. His quiet and thorough contribution was a stunning example of the huge behind-the-scenes effort that keeps our society running, and we are forever grateful.

— Susan Grose

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The introduction acknowledges the assistance of The American Gloxinia and Gesneriad Society. AGGS is pleased to have helped with specifically requested information and photographs for this publication as provided by Julie Mavity-Hudson, Photography Chair, and Jeanne Katzenstein, Editor of The GLOXINIAN.

Our Favorite Nematanthus

Compiled by Peter Shalit <ps83@cornell.edu> 1312 E. Denny Way, Seattle, WA 98122-2519

It's been a pleasure to read and edit the writings of several excellent Nematanthus growers and learn more about this fascinating genus. Now I'm inspired to enlarge my small collection of Nematanthus. Once you read what follows, I'm sure you too will find the temptation irresistible.

My Favorite Nematanthus ... by Dee Stewart, Stow, MA, USA

What's my favorite Nematanthus? The first thought that comes to mind is walking into the greenhouse and looking up at dozens of two-to-three-inch-long bright yellow flowers. The plant is *Nematanthus fluminensis*. It almost always has at least a few flowers and often has dozens of flowers dangling from long, bare stems. Its natural habit is to bloom on bare wood – the flowers show up better that way for us and for the pollinators. Those stems stretch about three feet in all directions, spreading over the top of other plants hanging in the greenhouse. Clearly, this isn't a plant for everyone.

As soon as I've settled on *N. fluminensis*, *Nematanthus corticola* pops into my mind. "*Nematanthus*" means "thread flower". Think deep pinky-red flowers dangling below the branches on six-inch long, thread-like pedicels. It's always an attention-getter. Almost everyone who sees it wants one. *N. corticola* is somewhat more manageable than *N. fluminensis*, and right now it's blooming at about 16" in diameter. *N. corticola* also keeps it leaves all along the stem. With the flowers dangling on such long pedicels, it doesn't need bare stems to keep the leaves out of the way of the pollinators.

Despite the attractions of *N. fluminensis* and *N. corticola*, I finally settle on *Nematanthus brasiliensis* as my favorite. A number of years ago, I walked into Dave and Colleen Turley's greenhouse, looked up, and said "What's that! I want it". "That" was *N. brasiliensis*. The flowers hang below the stems on one-or-two-inch-long pedicels. The calyx opens out into a flat, bright-red star above the dangling yellow flower, a combination reminiscent of *Drymonia coccinea*. This is the smallest of the three species and, like *N. corticola*, it keeps its leaves on the stems. It's not as floriferous for us as *N. fluminensis* or *N. corticola*, but I love it anyway.

As I've said, we grow our Nematanthus in a greenhouse. They're tolerant of a wide range of temperatures. They'll do fine from very warm temperatures down to almost freezing. Since they're epiphytes in nature, we keep them in small, well-drained pots. Soggy soil can rot the roots. That six-foot diameter *N. fluminensis* is in an eight-inch wire basket lined with moss. We water with a hose. A small amount of fertilizer is mixed into the water from the hose with a proportioner. We stop fertilizing completely from mid-October to mid-February. While the Nematanthus will bloom toward the back of the greenhouse where the light is fairly low, they'll bloom much more with higher light levels. Most of them will tolerate close to full summer sun without complaining.

Carefree Nematanthus ... by Helen Bortvedt, Sequim, WA, USA

Three Nematanthus grow in my separate sunroom. In 1992 I obtained *N*. 'Jungle Lights' and *N*. 'Tropicana' from my brother in Connecticut. At the 1996 Convention, I received *N. villosus* as a table favor. All three plants are

now in pots hanging about 16" from the glass ceiling in the sunroom where it gets rather hot in our summers.

All receive the standard care, or not, of my other plants. They are potted in my own mix of 2 parts peat / 1 part lava pellets and / 1 part vermiculite / plus a little lime.

I fertilize with each watering, using 1/4 tsp. of various fertilizers per gallon of water. I use Dyna-Gro, Peters 20/20/20, and a shot of 11-54-4 about once a month. I water all my plants with plain water at least once a month and have no problem with salts. I skip fertilizer November through January to let the plants rest as the room can get quite cool even though it is heated to keep a minimum temperature of 55°F.

Temperatures vary from 55°F (or a little less) to 90+°F in summer. We have a moderate Pacific Northwest climate and have not had a cold winter since 1990.

I like all three plants but my favorite is *N*. 'Tropicana'. I am still trying to grow it like my brother's huge ball of blossoms, but I do not have the southern exposure and warmer summers that he has in Connecticut.

Nematanthus in the Midwest ... by Susan Grose, Overland Park, Kansas, USA

I enjoy growing Nematanthus varieties as hanging baskets in natural light in my windows. I do have a few growing under my fluorescent lights, but they are only preparing for their ultimate destination in my windows and in preparation for growing outside on my patio in the summer months.

One of my earliest Nematanthus successes was with N. 'Tropicana'. I grew it for several years in a bright, sunny south-facing window in an 8-inch basket pot. Its dark green leaves and yellow, maroon-striped blossoms along with the decorative orange calyces often drew comments from visitors. Unfortunately I lost the plant after I moved from Massachusetts to Kansas. But I have a small plant that I am hoping to grow into another large specimen. I think this was one of the easiest Nematanthus for me to grow, and it blooms over a long period, probably almost continuously if it is kept evenly watered and fertilized.

Last summer at the AGGS Convention I acquired the lovely Nematanthus 'Castanet' show plant grown by Robert Hall. I was the winning bidder at the live auction for this plant. Since I have a large oak tree shading my indoor growing window during the summer, I hung this specimen under a Japanese maple tree on my south-facing patio. The tree provided very bright dappled shade for this plant. After the plant acclimated to the hot Kansas summer weather (95+°F), it began to bloom again in September. It never seemed to be distressed with what I assume was a dramatic change in its growing environment in being transplanted from Ontario, Canada to Kansas, USA. I kept it well watered and gave it the same reasonably regular fertilizer treatment as my other outdoor flowering container plants. When cold weather and frost threatened, I brought it into my living room south-facing window for the winter months where it has continued to thrive. This specimen has flowered on and off over the winter and has maintained its glossy, dark green leaves with reverse maroon coloration. The blossoms are an attractive light orange-pink. This plant is still growing in the six-inch basket in which Robert displayed it, proving how forgiving this plant can be if it is not repotted frequently. I am hoping to return it to the bright dappled shade of my patio for the summer when all threat of frost has passed.

Nematanthus wettsteinii ... by Julie Mavity-Hudson, Joelton, TN, USA

My favorite Nematanthus has always been *N. wettsteinii*. It was one of the first gesneriads I ever grew, way back in 1979. I was so excited by the cuttings I was given as they seemed so exotic, and I have grown it ever since.

N. wettsteinii is a compact plant, is very cheery, and, in my opinion, is prettier and more interesting than any of the hybrids. I have grown this species successfully under lights, in a window and in the greenhouse, although it looks different in each circumstance. To me it is most attractive when grown under lights, staying small and well colored, though it might be just as compact in a brighter window or greenhouse than mine.

I find *N. wettsteinii* grows best for me in a light, soilless mix high in perlite, fertilized at almost every watering with a dilute fertilizer solution. It is kept on capillary matting, which is usually allowed to dry out a bit between

waterings.

I take multiple cuttings (about five) and place them in a four-inch pot, pinching the tips off each cutting. The pot of cuttings is then placed into a plastic bag. After the cuttings are rooted in a couple of weeks, the bag is slowly removed over a three or four-day period and the pot is placed on capillary matting. It is best to pinch at least once again after the new growths have several pairs of leaves, though I tend to be a little lazy about this. This plant could be grown in a much larger pot with lots more cuttings for a bigger basket; but because I am lax about watering, I like to keep it in a pot no larger than four inches so that it will work on capillary matting. In a larger pot it could certainly be wicked.

Nematanthus wettsteinii is a species that is well worth growing, and it doesn't take a huge amount of space to have a nice plant, which is not always true for other varieties in this genus.

Spectacular Nematanthus ...

by Bill Price, West Vancouver, BC, Canada

I have to confess that with their shiny foliage and often-spectacular display of slightly odd flowers, I like most of the Nematanthus varieties I have grown or seen in shows. A few, however, stand out as particularly special.

My favorite is *N. fluminensis*. Even when not in bloom, this plant is magnificent with its upright growth and large glossy leaves – a rich dark green above with a dark maroon lower leaf surface. The large bright yellow, open-mouthed flowers that hang from the leaf axils are a bonus!

Second most favorite is the old hybrid *N*. 'Tropicana' with its small glossy green foliage on pendulous branches and its numerous red-and-yellow striped flowers. This is an excellent basket plant that may indeed qualify as an ever-bloomer. Several years ago, a small wall pot of *N*. 'Tropicana' in my kitchen was in continuous bloom for nearly two years!

Another favorite is *N. crassifolius* which has large shiny green leaves similar to *N. fluminensis* but without the maroon undersurface. It produces large wide-mouthed, bright red flowers on long pedicels and is very showy.

As most Nematanthus are epiphytic, I find they do best in a very light, open soil mix with at least 1/3 perlite or coarse gravel (with 1/3 vermiculite and 1/3 New Zealand sphagnum moss). They do best when pot bound and definitely prefer to dry out between waterings. I use my standard fertilizer regimen of 1/4-strength fertilizer weekly and they are not fussy.

Other than seeming unhappy at temperatures below about 12°C (54°F), the varieties I have grown seem quite tolerant of usual house temperatures.



Nematanthus wettsteinii is showy in both flower and fruit (photo by Jeanne Katzenstein)



Nematanthus brasiliensis (photo by Alain Chautems)



Nematanthus fluminensis (photo from the GRF collection)

Regarding light, they do equally well in natural light or under two fluorescent tubes (until they get too large). I have grown several varieties in an east-facing window in my office or several feet back from a south-facing window at home.

Dangling Jewels ... by Robert Clark, Lawrence, MA, USA

My favorite varieties of Nematanthus are the ones that have the dangling flowers on long, thread-like pedicels. The dangling flowers of *N. corticola* and *N. brasiliensis* make it apparent why this is the genus of "thread-flowers". Both of them look like fish caught on an angler's line. The first time I saw *N. corticola* in Bob and Dee Stewart's greenhouse, in Stow, MA, I was amazed at the flowers – large red hanging fish with sunken-in cheeks! They were fascinating! The next time I was rummaging through their greenhouse, I saw *N. brasiliensis*, with its huge yellow dangling flowers and very large decorative calyces. This species has been a little harder for me to grow – perhaps it wants a bit more humidity than my set-up provides. But *N. corticola* grows and flowers well on my light stand, though it does get rather large. They both would make excellent basket specimens, given enough light and room.

Nematanthus fissus: the "upside-down-flowered" Nematanthus ... by Dr. Miriam Denham, Longmont, CO, USA

We received this plant many years ago as *Hypocyrta selloana*. (Hypocyrtas are the plants with short-pedicelled flowers now included in the genus *Nematanthus*. Nematanthus means "thread-flower", referring to the long pedicels of the hanging flowers of the genus in its original sense.)

When my late husband, Dr. Dale Denham, was writing the chapter on Hypocyrtas: "Hypocyrta, a Real Charmer" for Peggie Schulz' book, Gesneriads and How to Grow Them, he called my attention to the fact that the flower of H. selloana was "upside-down" (on the dorsal side). In other words, the swollen portion of the tube is above the mouth of the flower instead of below (on the ventral side) as in other "hypocyrta" species.

I had not thought further about it until John Clark discovered that flowers in the genus *Alloplectus* were in two classes: those that are "right-side up" and those that are "upside-down" (resupinate). However, when I checked the illustration in Peggie Schulz' book, I discovered it was printed incorrectly, with the swelling of the flower on the lower rather than upper side. Since I still have the plant (testimony to its durability!) I have tried, without success, to trace at what point the flower turns over. John and I have exchanged a number of emails about it.

Someone needs to do some developmental studies. Do the veins change their traces in the stem below the axil? *Nematanthus* has a superior ovary, so the development of the ovary has nothing to do with it. In the orchid, the only other resupinate flower I know, you can see the twisting of the inferior ovary that produces the "upside-down" flower of the orchid.

Crazy over Nematanthus ... by Vivian Scheans, Lake Oswego, OR, USA

When I first fell in love with gesneriads in the 1960's, I had a plant of *Nematanthus* 'Rio' in my small collection. I grew it in a light stand in my front hall where it bloomed constantly. Its nice shiny leaves and compact growth made it a lovely houseplant and it was one of my favorites.

In those days I thought all Nematanthus had small shiny leaves with little guppy flowers and grew into nice small compact plants. That was before I saw Hans Wiehler's hybrid N. 'Othello' with its huge red-backed leaves and beautiful bright blossoms. Now I've fallen for all the large-growing Nematanthus. I think they are beautiful hanging in the greenhouse even when not in bloom. I especially like all the large-growing species from Brazil shown on Mauro Peixoto's website. Currently I have N. sp. 'Santa Teresa', N. fritschii, N. fissus, N. villosus, and N. maculatus, but I would love to add all the others to my collection too.

Sub-Arctic Nematanthus ... by Ingrid Lindskog, Umeå, Sweden

For the first time in my life, a Nematanthus is doing really well for me. I bought it in early February at my local garden center. As the plants were being unpacked, I grabbed a very compact plant with plenty of buds and asked to have the invoice checked for a name. It was listed as *N. gregarius*. The plant looks exactly like the ones that have been offered shortly before Christmas ever since I was a kid. Usually the plants lose all their leaves even before the traditional date to throw out the Christmas tree (January 13).

Last fall I shook my head as barely rooted cuttings, three to a pot, were offered for sale in late October – from Holland, of course, where they have no winter darkness. Surprisingly, none were offered at Christmas time. My new *N. gregarius* (which agrees with the description in the AGGS Register) was given extra humidity and a mixture of natural and artificial light. It has grown, stretched, flowered and not lost too many leaves. Hopefully, the trade has now changed its ways and this decorative plant will from now on be offered for Easter.

A long-time survivor in this house close to the Arctic Circle is a plant of N. 'Stoplight' started from a cutting from Bob and Dee Stewart in 1996. It produces a few flowers every summer and loses loads of buds in between. One year it lost all leaves during winter but came back after being severely cut down in spring. Now I have two, one in a light stand and one in an east-facing window. They seem to have an overriding need to lie flat on top of other plants, and so manage to keep their leaves through winter.

Very pretty calyces, with upturned sepals forming a crown, have endeared me to the *N. corticola* cutting I got from the same source at last year's convention. But the long thin pedicels break easily, so I have not seen any open flowers yet. I am happy to see the plant still alive and growing, mixed in with the foliage of surrounding plants. Still in a mini greenhouse standing on the floor of the plant room next to a light stand are some cuttings of *N.* 'Black Gold' that have now started to grow vigorously with the advent of more natural light. Those are the same cuttings that last year were draped around my statue of Roman emperor Flamingius at the Morristown Convention "Flamingo Fest".

As for the white-flowered *Nematanthus* species, *N.* sp. 'Santa Teresa' and *N. punctatus* ined., they are doing well in the south of Sweden but not up north here with me. However, I may have found the over-wintering method for the latter. Spread out on top of the dormant Sinningia tubers with very little light and hardly any water, it is keeping all its leaves nice and green. *N.* sp. 'Santa Teresa' in a west-facing window keeps sending out long weak stems but no flowers. I won't mention the other Nematanthus I've killed over the years. Frankly, they have faded from my memory.

Notable Nematanthus ... by Ben Paternoster, Huntington, NY, USA

Many varieties of Nematanthus have been part of my gesneriad collection over the years. Some I will recommend as plants for you to grow; others are plants that I wish to comment about for different reasons. In my experience, Nematanthus require bright light to be grown well, and many can get quite large. This said, I still believe there is a Nematanthus for you.

Nematanthus 'Bambino', created by Bill Saylor by selfing N. 'Bijou', is a great compact plant with well-defined red splotches on the backs of dark green shiny foliage. It almost always has its orange flowers and can be

grown successfully under florescent tubes.

If you have the opportunity to grow outdoors, in a greenhouse, or in a very sunny window, I would recommend trying one of the larger Nematanthus that have the long pedicels for which the genus was named. An old hybrid by Dr. Robert Lee that I have grown is N. 'Stoplight'. The red flowers, about two inches long, hang on pedicels almost five inches long. The backs of the leaves have a dark purplish-red color with narrow green margins. If you prefer a bright yellow flower, grow the species N. fluminensis. It has five-inch pedicels and dark green leaves with red on the reverse.

I love the hybrid *Nemananthus* 'Apres'. The form is upright, and it has glossy green leaves with red blotches on the reverse. The red-orange, pouch-shaped flowers are fairly large for this type. Unfortunately, I have not been able to grow it well – it always has bare woody stems with a tuft of foliage at the ends of the stems. I haven't figured out if I am watering too much, too little, or inconsistently. Any help?



There is a perfect size of Nematanthus for every grower:

*Nematanthus 'Bambino' (small)

*Nematanthus 'Castanet' (medium)

*Nematanthus 'Stoplight' (large)



Grow *Nematanthus australis* for its attractive flowers and showy calyces and for its striking display fruit as seen on the front cover (grown by Maryjane Evans; photo by John Evans)

Everyone likes a bonus. Grow *Nematanthus australis* because this species has calyces that have dark red-bronze coloring that bands the edges. This feature adds color to the plant both before and after the time that the bright orange bloom is present. The plant is an upright grower with small green foliage. I find that it requires very bright light to keep the internodes short. In fact, I grew it in full sun outdoors last summer.

As I indicated earlier, many Nematanthus can get large. That is probably the reason that most of us grow them as basket plants. We may have to think outside the box to be able to enjoy growing some of the members of this genus. A few months ago a member of the Long Island Chapter entered an exhibit of *Nematanthus fissus* into our monthly Little Show. Instead of being the usual basket plant, her exhibit was a single stem. The stem was bare on the bottom, but toward the top it branched and had about five or six blossoms. It looked almost as if it had been trained as a standard. This species grows stiffly upright. I was very curious to see what the judges would do with this exhibit. I am happy to report that they found it very pleasing and awarded the plant a red ribbon. The points they deducted were not for "not a fully developed specimen". They recognized that the exhibitor could choose how he/she wanted to grow the plant. Of course there was no other entry in this class. In a situation in which a single-stem plant is competing against a multiple-stem basket, judging may be more difficult.

I hope my ramblings about Nematanthus have suggested some plants you may want to try to grow and encouraged you to think about different ways to grow them. Good luck!

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